MOTOR AGE

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MOTOR GERM IN THE NATIONAL CAPITAL



Washington, D. C., May 21—When the motor germ decided to invade Washington he chose as the point of his greatest vantage, from which to spread his infection, the capitol steps, whence he could look down on the almost endless stretch of level avenues and streets, shaded by a forest of trees such as no other city in the land can boast. Seeing them, his chug-chugging heart beat in a rapture of delight, detecting the most vulnerable attacking point.

He was accompanied by his fascinating daughter, the season's debutante, Miss Bacillis Motormaniacum, a little lady of winning ways, and it was her father's intention that she should break into the "first circles of society" without the risk of a discouraging amount of "turn-down,"

for he knew that the denizens of that great building carried the open sesame to every place. He had not long to wait for a victim, for in a moment he observed two dignified senators advancing toward him. He was not able to identify them, for from his point of view they were hidden by large-brimmed hats. It was evident, however, that they

were from "way down in Dixie land."

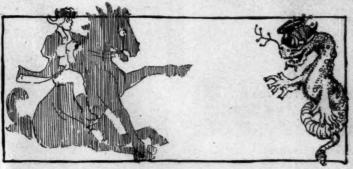
This was his chance, and in a wink he had landed upon the hat brim of the larger of the two men. They were engaged in earnest conversation and one was heard to remark: "I tell you, Joe, I wouldn't trust myself in one of those pesky, thumping, jumping things for a million."

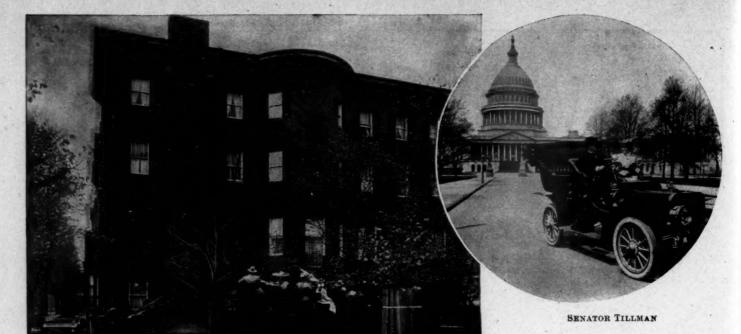
"Hold up there, Ben; don't be rash," said the other, "you want to remember that you are just as liable to get the germ on you as me or anybody else, and when it once gets into the circulation they say there is no cure for it," and so the conversation continued, while the motor germ leaped from one hat to the other, all the time laying plans to plant his deadly infection. He even laid a bet that he would

soon land them before the smiles of his daughter, Miss Bacillis Motormaniacum. "Once I get them into a machine they are done for, sure," he mused.

From a case of fever it has grown into a raging epidemic, till today every prominent man or woman in the city may be seen spinning over our grand avenues and beautiful streets in their automobiles. Each day at noon a long line of automobiles may be seen before the senate entrance of the capital, each depositing its senatorial burdens and scurrying away. At adjournment they reassemble to take up their freight of lawmakers, who at once become lawbreakers, making time which makes the district speed limit look like 30 cents.

Around the embassies and legations there is a constant chug-chugging of the diplomatic and society cars. The hotels too, all have their line of automobiles awaiting their guesta and owners, many of whom are actors and actresses who bring with them their own pet machines. They, too, enjoy Washington streets and magnificent outlying drives.





RUBBERNECK COACH IN FRONT OF LONGWORTH RESIDENCE

Miss Motormaniacum has been most enthusiastically received in the nation's capital, and while it is true that she has not been officially welcomed at the White House, the motor germ is a successful mixer and a good social hustler, and he has determined to leave no flaw in his daughter's social triumphs. It is hinted that before long she will be invited to take up the strenuous life and abide in the executive mansion.

Conclusive evidence is at hand that the infection planted in our senator from South Carolina "took," for the senator and Mrs. Tillman, with the senator at the steering wheel, were recently photographed in their big car just back of the capitol. The senator looked the picture of composure and there is no doubt that he has escaped any very injurious effects.

One of Washington's fairest automobile

enthusiasts is Baroness von Sternberg, who owns her own light car of foreign make and spins around the driveways every fine afternoon. A photograph taken shows her seated in the car with her sister, Miss Violet Langham, while her husband, the ambassador from Germany, Baron von Sternberg, follows on horseback. The background of the picture is the site of the new German embassy.

The Baron and Baroness Moncheur, the minister from Belgium and his wife, were caught one day as they came up from the speedway, and whizzed past the state, war and navy buildings. Baroness Moncheur has been too devoted to horses ever to give much cordial support to Miss Motormaniacum, but she sometimes consents to go with her husband, who is one of the most faithful devotees of the sport.

Baron Hengelmuller, ambassador from

A ustria-Hungary, has one of the most valuable foreign cars in Washington, and his wife and little girl are familiar figures around the Washington driveways. When they are fortunate enough to have Baron Hengelmuller with them they make long tours into the country.

General Morteza Khan, the minister from Persia, is especially proud of the fact that his big car can chug up the hill to the Soldier's home and is frequently seen motoring out North Capitol street with a friend or secretary.

Sir Chentung Liang-Cheng, the minister from China, is so devoted to the sport that he will rouse his secretaries for a spin ar almost any stage of diplomatic calculation, and drive them out to "clear their brains." So great is the faith of Sir Chentung Liang-Cheng in the clearing-out process of an automobile ride for tired diplomatic brains, that he often spends an afternoon searching about Washington for beautiful and unfrequented driveways. One of his favorites is just below Washington, along the banks of the Potomac.

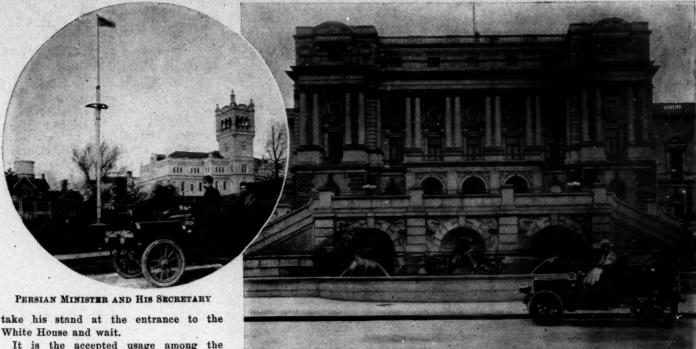
Lloyd Griscom, who has been recently appointed United States ambassador to Brazil, insisted upon taking an automobile ride every day of his sojourn in Washington. So to "snap shot" the famous diplomat, a photographer has simply to-



COLONEL DE PEDERNEIRAS, BRAZILIAN AMBASSADOR



BARON HENGELMULLER IN COLUMBIA ELECTRIC



MRS. GRATZ HELM, IN A WINTON, IN FRONT OF THE CONGRESSIONAL LIBRARY

White House and wait.

actors and actresses in Washington to drive about the city in automobiles, and those who are not fortunate enough to have their own cars make arrangements for one even before they decide on a hotel.

Mrs. Leslie Carter has her own car, made after a pattern she herself designed, a pattern which has been extensively copied in New York, especially in the open cars for summer driving. The tonneau is made basket-fashion, in leather imitation of light-colored straw, making the whole en et light and cool. While Mrs. Carter was Naying in Washington last season, her car became a familiar sight on the streets. She was photographed in front of the capitol.

Edna May is an expert driver, and can manage a big machine without a bit of trouble. Her petite beauty is admirably set off by the dark red cushions of the car she so skillfully guides. She and her sister, who had been over in Maryland for an afternoon's outing, pause! for a snapshot in front of the White House,

Colonel de Pederneiras, mi itary attache of the Brazilian embassy, is another diplomat who has taken Miss Motormaniacum unto his heart, and can be seen any afternoon in Rock Creek park, driving his own machine, or accompanied by his wife and their friends. In the picture taken in the middle of the creek, he has his wife and her friends in the tonneau. while he is endeavoring to ford the creek without any assistance from his chauffeur. In spite of his long experience, Madame Pederneiras is offering advice and comment on his steering, much to the amusement of the party.

Everyone is familiar with the tourists who, when visiting Washington before Miss Alice Roosevelt's marriage, insisted on having her pointed out to them, with her affianced husband. The tourists now are just as interested in the home of Miss Alice, and fortunately for the tourists, any old home doesn't need to do duty, as the real thing now. It stands on the corner of Eighteenth and I streets, and the big Seeing Washing-

ton automobiles have it always in their circuit. The car generally stops, so all the visitors can get a good look at the house. They say that once Mrs. Longworth leaned her head from a window as the big car stopped at her gate, but the less fortunate tourists refuse to believe it. But the favored ones shake their heads and smile. Certain it is that all the big cars are stopped there, and every eye is fixed intently on the curtained windows.

Uncle Joe Cannon, speaker of the house, while rarely seen at the wheel himself, is a devotee of the sport. With him the infection took. He is frequently seen on the street either going or coming from the capitol, as well as upon the suburban roads. He is usually found seated in the car operated by his niece, Mrs. Gratz Helm, who is one of the expert women drivers in and about Washington and is often accompanied by her distinguished uncle.



BARON VON STERNBERG ON HORSE AND THE BARONESS IN CAR



SENOR CALVO, COSTA RICAN MINISTER AND FAMILY

GOOD FUN IN PARADE

Annual Turn-Out of Long Island Automobile Clnb in Brooklyn Ends in Usual Scorch

New York, May 21-Over in Brooklyn on Saturday, the Long Island Automobile Club gave its annual parade. weather, pretty girls and owners enthusiastic enough over the gala event to decorate their cars with both club and national flags, graced it. Quite a number of New York Motor Club members, who knew from past experience that a lively run was ahead, went over, and so did quite a contingent from the Richmond County Automobile Club. The A. C. A. was also represented in line here and there with cars that carried the club bannerettes affected by the three clubs already mentioned, though the A. C. A. has adopted a catchy club flag of its own, which made its debut on the 2-gallon efficiency test.

There were 130 cars in line. Those of the promoting organization bore American flags in addition to the club banners. The N. Y. M. C. and the R. C. A. C. cars for the most part carried club flags. Unattached paraders entered into the spirit of the affair and displayed bunting and other decorations. Brooklyn laymen, too, contributed their share toward the spectacular success of the annual motor outing of the city of churches by decorating quite a fair sprinkling of houses along the route.

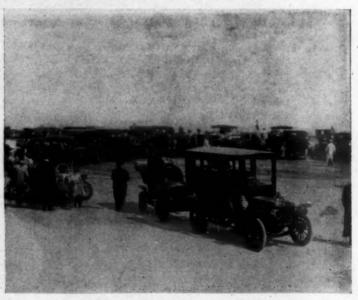
Previous Long Island Automobile Club parades have been rather brisk little spins, as the reader may remember Motor Age has told in its stories of past parading functions. On parade day all speed laws, so

far as enforcement goes, are in suspension, thanks to the church city's coppers, who have on at least 1 day in the year a heart filled with kindly indulgence to the man behind the goggles. As in former years, four motor cycle cops headed the parade, and the clip these pacemakers set through the streets was one that straightened out flat the club bannerettes and the ribbons and veils of the women, too.

But when the head of the Ocean boulevard was reached and the broad 5-mile homestretch to Coney's isle lay in front of the paraders there came some fun. Former parade speed records were smashed to smithereens. Charles Jerome Edwards, the grand marshal, had promulgated an order that in the procession down the wide parkway to the sea the paraders should move up to two abreast. Some obeyed the order decorously. Then one big car shot by the orderly line and in a jiffy a half-dozen others pulled out and

went after the runaway helter skelter. In a minute the flying squadron had passed the grand marshal and was in full cry after the motor cycle pilots. The cops had no lack of sporting blood in their composition and opened her up for fair, but they were soon collared and passed. Statuesque mounted policemen at the roadside almost smiled with glee at the grand race, though they mechanically raised their hands in deprecatory warning. Six abreast the cars tore down the boulevard in their wild race to the sea. The whole roadway was filled with automobiles, big and little, racing in a great cloud of dust. "parade" had Fournier's 59% seconds mile and the annual cycle path handicap over the same course beat to a standstill.

Chairman Charles Jerome Edwards is still looking for the fellow that started it. Someone, who claims to have made a count, says that there were twenty-seven American and two foreign makes represented in the parade and that the leaders in number



PARADE'S END AT CONEY ISLAND

were: White, 14; Franklin, 12; Autocar, 9; Locomobile, 8; Cadillac, 7; Packard, 6; Winton, 6; Royal, 5; Pope-Hartford, 5; Ford, 5, and Oldsmobile, 5.

EVANSTON RELENTS

Chicago, May 22-Meeting the Chicago Automobile Club half way in its efforts to put down scorehing, Mayor Barker and Chief of Police Frost, of Evanston, where motorphobia raged last year, have let up on the motorists. Instead of arresting them, the policemen simply warn the offenders and also tell them that another violation of the law would mean arrest. Mayor Barker and Sidney S. Gorham, legal adviser of the local club, are soon to have a conference which is expected to result in an understanding between the motorists and the authorities. Last year Evanston averaged twenty arrests each Sunday, and it was there the sensational tire shooting incident occurred late last summer.

RULE DOES NOT PLEASE

New Yorkers Protest 2,000-Pound Weight Limit Proposed for The Glidden Cup Cars

New York, May 22—Motor Age's exclusive publication of the salient points of the rules of the Glidden tour created a great sensation here in trade, club and newspaper circles. The barring of cars under 2,000 pounds was roundly and unanimously denounced by the trade and a majority of the press. Telegrams were dispatched hot-foot to Paul H. Deming, chairman of touring committee, and to Sidney S. Gorham, secretary of the A. A. A., protesting against the rule. One of them pointed out the fact that at least forty-seven makers had models embraced among those ostracised.

One of the telegrams brought an answering wire from Chairman Deming, which

said: "Rules all wrong anyway and must be revised." The New York dailies employing automobile editors, whose opinions carry weight, were practically unanimous in their criticism of the "freeze out" of the small cars. The Herald quoted Motor Age's editorial protesting against the 2,000-pound limit, after saying:

"From Chicago, where the new rules for the Glidden trophy tour have been drafted, comes the first intimatica of the conditions that will govern that event. These rules, which, like the dates and route announced, are only tentative pending the approval of the Glidden trophy commission, introduce innovations that not only are surprising, but, if adheed to, are likely to seriously, affect the tour's success.

"Most ry narkable is the decision that no car yinghing less than 2,000 pounds will be eligible to compete for the Glidden trophy; that each car must carry four passergers of an average weight of 125 pounds each, or their equivalent in ballast, and that the cars must be fitted with touring fodies and tonneaus.

"Motor Age, a Chicago publication, in commenting upon this strange decision, advises that owners of light cars will be justified in entering vigorous protests against the promulgation of any such rule and in giving the tour the cold shoulder in case the rule be enforced. The committee is accused of providing a means of favoring those who are fortunate enough to possess large cars rather than the promotion of automobiling in general and touring in particular."

The American also reproduced Motor Age's editorial and said:

"If it is not rescinded a prominent

journalist will offer a number of trophies of great value for the lighter cars to compete for over last year's Glidden course."

The Evening Mail commented as follows: "The trade and fraternity have indignantly denounced the 'freeze out' of the 'small cars' from the Glidden trophy competition, a contest established primarily to demonstrate touring efficiency. Of course, the committee was up against a difficult proposition in framing rules for the picking of a single winner among a bunch of cars of varied price, weight, horsepower and cylinder number. For all that there seems to be no excuse for cutting out from a national competition any cars if they are practicable for touring."

SIXTY IN OPEN AIR SHOW

New York, May 22-Sixty exhibitors in all have taken space for the 3 days' open air show and carnival, which begins at the Empire City track on Thursday. The show will be open morning and afternoon.

Various competitive tests will be conducted on the track in the afternoon. For these tests there have been eighty nominations. The motor cars will be exhibited under a big tent. covering 22,000 square feet and the accessories in the show under the grand stand. Among the cars to be shown are the Matheson, Ariel, American, Marmon, Wayne, Buick, Glide, Neilson, Cadillac, White, Ardsley, Decauville, English Daimler, Franklin, C. G. V., Winton, Crawford, St. Louis, Darracq, Rainier, Reo, Leon Bollee, de Dietrich, Northern, Welch, Royal Tourist, Rochet-Schneider, Rambler, National, Frayer-Miller, Advance, Stevens-Duryea, Acme, Oldsmobile, Aerocar, Corbin, Maxwell, S. & M. Simplex, Mercedes, Panhard, Renault, Auto-

car, Hewitt and Clement-Bayard. The committees in charge of the big event have worked hard for its success and it looks as if their efforts would be well rewarded, for local interest has been aroused

in the proposition.

IN THE NICK OF TIME

Chicago, May 21-Three footpads attacked A. E. Neilson, a local druggist, at Clark and Chestnut streets last night and were about to rob him when Oaks L. Cosgrove, a chauffeur, drove up in a car and told the victim of the holdup to jump in the car. At this the robbers fled, whereupon the chauffeur hustled to a nearby police station, picked up a couple of bluecoats and went in pursuit of the fleeing footpads. The car caught up with them and all three were jugged. At the station it was found that each of the trio carried a revolver, while one of them also had a hatchet hidden under his coat.

SELDEN MOTOR IS RUN

Original Engine, Placed in Car Built by Inventor's Son, Given Road Test in Patent Suit

New York. May 19-As a part of the testimony now being taken in the suit of the Electric Vehicle Co. against the Ford Motor Co., George B. Selden showed today to a group of lawyers and experts representing both sides of the case the original engine, on which the famous patent is based. It was built in 1878 and the patent thereon was granted in 1895. The. engine is a queer-looking three-cylinder motor of 3 horsepower. It was set on a body built by Mr. Selden's son, Henry R. Selden, from the original drawings on file in the patent office.

In the course of the case it had been intimated by the defense that the patent was only a drawing and that put into exe-



THE ORIGINAL SELDEN CAR-G. B. SELDEN INDICATED BY STAR

cution would not run. The demonstration, which was largely intended to prove the contrary, took place in the basement of the Decauville Automobile Co.'s garage, where the car has been stored in a vault and carefully guarded for a week or more. Henry R. Selden acted as demonstrator and everyone there was given a ride in the car for 100 yards or more.

After the demonstration a stenographer was called and the attorneys and experts conducted a minute inquiry into the working of the machine. At the conclusion of the examination the car was taken outside and photographed with its inventor and driver on the seat.

Among the examining party were R. A. Parker, counsel; Professor Carpenter, of Cornell, and Jesse Smith, experts, all three for the Ford Motor Co.; Samuel R. Betts and William A. Redding, counsel for the plaintiffs; S. F. Fisher, formerly assistant commissioner of patents and expert for the plaintiffs; George B. Selden, in effect the witness on the stand, and former Senator George Raines, on the Electric Vehicle Co.'s side of the case.

Though the buggy fitted with the Selden motor ran the opposition lawyers and experts and several independent "doubting Thomases'' present declared that the demonstration amounted to nothing. It was charged by some of them that the three cylinders were really the only part of the original engine produced, and besides the reproduction of the missing parts from the original drawings there had been entirely new spark plugs and batteries added, making the car practically a new vehicle built around the original three cylinders.

In reply to these criticisms, Lawyer Cunz, the head of the A. L. A. M. patent department, said: "One test of a patent is whether the patent specifications and drawings describe the invention so that one skilled in the art can produce an operative device, as certainly Mr. Selden has

> proved has been done. The question of ignition is an open one. Coils were used for 15 years before 1878, the date of Mr. Selden's invention."

There was much questioning of the Seldens, father and son, by the Ford lawyers and exhibits as to the use of kerosene and alcohol for motive power. Their reply was that "hydro-carbon" covered these fuels. Apart from these technical points the interest of most present centered in the peculiar lines of this pioneer in American motor car construction. Speculation on the selection of three cylinders was rife, and the present introduction of six cylinders in so many high-powered presentday machines pointed to the wisdom of the designer of the original Selden. From a de-

velopment point of view this is the most important feature of the motor and here it was the experts on both sides devoted most of their atention.

MEGARGEL IN CHICAGO

Chicago, May 22-Percy Megargel and his mate, David Fassett, arrived in Chicago last Saturday afternoon on their way back from the Pacific coast. Giving the Reo Mountaineer a rest, the tourists resumed their journey this morning in the hope of reaching New York by Decoration day. Megargel's reception in Chicago was a most enthusiastic one, the local motorists giving him the glad hand in a way that made the travel-worn man wish all the towns and cities he struck were Chicagos. Assistant Sales Manager Rueschaw ran down from the Lansing factory to superintend the job. While here Megargel made his headquarters at the store of Ralph Temple, the local Reo agent.



CHANGE IS DEMANDED ROM all parts of the country the

American Automobile Association is receiving protests over the rules drafted for the government of the Glidden tour, published exclusively in Motor Age last week. The protests are over that section which places the minimum weight limit for cars competing for the trophy at 2,000 pounds and insisting that competing cars shall be provided with seats to accommodate four people. It should not have been difficult for the framers of the rules to forsee the effect of any such rule, which could have no other appearance than favoring the wealthy owners of large cars. The protests strongly indicate that owners of runabouts are interested in touring and, if given the opportunity, will participate in the Glidden. They do not want to be shut out of any contest; they stand on the common ground with the owner of the big car, even if not blessed with so much wealth. It may be said, however, that the committee framing the rules was wise in sending out a rough draft of the conditions governing the contest before the final rules were adopted, thus gaining, through criticism, the feeling of the motoring community in the matter.

TOUR SEASON OPEN



ARLY touring in motor cars is in vogue, notwithstanding the fact that weather conditions in almost all sections are somewhat uncertain at this time of

the year. The country has been fortunate in having a comparatively dry spring, resulting in fairly good road conditions in most sections. Touring has become enjoyable within the past few years, owing to the reliability of motor cars. The tourist now feels certain of reaching almost any destination and of getting home without serious mishap. The motorist has found the farmer not only reasonable and interested in automobiles, but more than willing to lend a helping hand if necessary; he has found hotelkeepers and shopkeepers more than anxious for his patronage; he has found people all over the country catering to his wants and, naturally

enough, ready to charge pretty stiff prices. All these things-save the stiff pricesare responsible for the interest in touring. Even today tourists are reported in many sections of the country, taking advantage of good weather and good roads and bent upon striking out and living in the open air and close to nature as much as the spring, summer and fall seasons will permit. And it has only just begun; tourists will be as thick as flies in another month. Touring is what makes automobiling satisfactory and consequently popular; popularity begets sales-and when there are four times as many motorists as there are now there will be such a tidal wave of demand for good roads that the country will some day wake up and wonder why automobiles were not thought of before for use in this pleasant way.

FRENCH CLUB'S ATTITUDE



HE governing body of France reminds one of a pouting child that cries because it cannot have its own way about all things and that soon forgets its

troubles. It has become an annual thing for the French club to kick over traces. It is now positively, though perhaps not officially, announced that France has dropped the Vanderbilt cup race for good and that it will not be represented in the race this year. This ought not to stir up the least particle of worry on the part of the cup commission, for it is

reasonably certain that French makers will be represented in the race regardless of the French club's attitude. The results of the two Vanderbilt cup races have been so satisfactory to the French makers that there is little likelihood they will be such strong supporters of the French club as to throw away golden opportunities for securing good advertising-and that is all there is to a race of the magnitude of the Vanderbilt, the grand prix, or the Bennett, the latter now on the shelf. When it comes



to a show down the French makers will be found entering cars and making energetic preparations for competing in the Long Island affair of 1906 and with every confidence of again carrying off cup honors. Even if the French club does not feel inclined to act as the representative of this country in receiving entries, there will be some provision for this. It is true this country desires the French cars as competitors-it also wants the Italian and the German and the British. It wants the Vanderbilt cup race to be what it was intended to be and what it is-an international race. And it is an international race, notwithstanding the fact that the French club believes the grand prix to be the only legitimate international affair. Efforts at conciliation ought to be made, but if it is necessary to do without the help of the French club and even the French cars there is every belief the third Vanderbilt cup contest will take place and will be a success, though the winner will have been robbed somewhat of glory through the absence of the Frenchmen and their racing cars. With or without French machines the event will be an international one.

ENTERTAINING ORPHANS



T HAS been the good fortune of hundreds of little orphans all over the country to be treated each spring to a day's outing in automobiles, fur-

nished by generous owners. New York started the scheme, which spread rapidly to Boston, Buffalo, Cleveland, Chicago and other cities. The only criticism that can fairly be made on such work is that once a year is by all means too infrequent for the fortunate to do something for the unfortunate; if orphans' day occurred at least twice a season it would be none too much good for a good cause. It should not remain for the larger cities to be alone in giving the orphans a day's airing-the second and third class cities, and even the larger villages and towns, could with commendable grace find some work along this line. New York motorists have already set a date for their orphans' day and other cities are preparing to follow suit, climatic conditions, of course, being re-

> sponsible for the dates in various places. It will be to the credit of motorists all over the country to take up this work and give a few hours to the little ones; it will not only elevate motorists in the estimation of the public, but it will take away a good deal of the curse that some people are wont to cast upon the fraternity, to say nothing of the actual good it will do. Orphans' day ought to be a fixture with all the automobilists in each and every place where there are orphans and automobiles.



The Glidden bomb that exploded in New York last week was a 2,000-pound one.

Any old time the Automobile Club of France thinks this country can't run a road race without it—well, just watch the smoke on Long Island in October.

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Mayor Tom L. Johnson is a motorist himself, and this probably accounts for his ordering the police of Cleveland to desist from shooting at the tires of other motorists.

Blue and yellow are the colors of Pennsylvania's new state tag. The old school doggerel, "Blue and yellow, catch a fellow," will come in pat when a policeman is in pursuit of one of the untagged.

When Great Britain buys as many foreign machines as are made at home, there would appear to be something decidedly wrong with the home manufacturers, either from the making or selling standpoint.

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It is difficult to keep a good thing down—which is probably the reason for the continued rumors of the proposition of the American Motor Car Manufacturers' Association to hold an open air show in the fall,

The Aero Club of America has solved the good roads problem. If its favorite mode of locomotion becomes universal Americans will not care whether or not the government builds national highways —we won't need 'em.



Strike of the workmen in the French automobile factories is settled.

mobile factories is settled.

Hill-climbs at Minneapolis and Cincinnati produce interesting results.

Milan gold cup tour, first of present season, starts in Italy with forty-one cars in line.

Successful parade of Long Island Automobile Club is held in Brooklyn; large turnout of

cars.

Automobile Club of France washes its hands of Vanderbilt race and will not be officially

represented.

Tentative rules for Glidden tour produce outcry in New York over 2,000-pound minimum weight limit.

Percy Megargel, transcontinental tourist, reaches Chicago, and after 2-days rest resumes journey to New York.

Postponement of the Circuit European to the middle of next year now being considered by promoters, who are unable to complete their plans for this season.



A MOTOR PHOTO CARTOON



CHARLES J. GLIDDEN

Maybe France just wants to be coaxed.

That little referendum of the Glidden tour committee rather did the business.

It's getting so now the only sure way for a senator or congressman to get his name in the public print is to father a good roads measure or to favor the free alcohol bill.

Barney Oldfield was haled up before a southern judge for scorching and pleaded ignorance of the laws of the state as his excuse. That sounds well coming from Barney.

Evidently the Automobile Club of France does not like the yard of the American Automobile Association. Maybe, too, the splinters in the cellar door are too sharp.

The howl that has gone up from San Francisco over the bill for automobile rental is a loud one. Certainly, \$157,599 for the use of fewer than 1,000 cars for 2 weeks has all the other get-rich-quickers skinned to a frazzle, if the charge preferred this week is true.

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If the supreme courts of all states follow the example of the Pennsylvania high court in deciding the license laws, automobile builders will have to design ears with extra large bulletin boards on the backs thereof for the purpose of carrying tags. All of which suggests that, if the license laws are held to be good laws, it is about time the matter were turned over to the interstate commerce commission with the railroad freight rate-making powers.

The motor germ has been discovered in Washington. Mike Robe found it, probably.

Senator Morgan has been heard from. He hasn't found another beach or picked up a new mountain—he's changed his telephone number.

Arrived in Chicago, May 19: Reo Mountaineer, Percy Megargel, captain. Cleared for New York May 22: Reo Mountaineer, Percy Megargel, captain. That's all.

French automobilists are a peculiar lot and different from other people inasmuch as they have a bad habit of starting something and failing to finish it, even if it is only a good, healthy kick.

When all the sparrow cops of the country are supplied with motor cycles look out for some hot old scorehing. The sparrow cops have the fever, just the same as ordinary mortals.

The Corbin people certainly have the best wishes of the small boy for the success of the rattan-bodied runabout. The youngster hopes they will use up the entire supply and not leave any for the school ma'ams.

One shouldn't judge the exact value of automobiles by the charges made for their use in San Francisco following the earthquake any more than he should judge the value of gasoline by the price asked by John D. Rockefeller.



May 15-25—Milan gold cup race, Milan, Italy. Italian Automobile Club.

May 15-31—Endurance run, Italy.
May 24, 25, 26—Open air show, New York.
Automobile Trade Association. Empire City
track.

May 27—French motor cycle eliminating race.

June 1-3—Electric vehicle competition,

France.
June 6—New York Motor Club's orphan day.
June 9-15—Herkomer cup competition for
touring cars, Germany and Austria.

June 13-14—Provincial cup touring car competition, France.

June 17-24—Week of Marsellles, France.
June 18-25—New York Motor Club's second
annual economy test.
June 26-27—Grand prix race, Sarthe course,

Autombile Club of France.

July 14-17—Automobile racing at Ostend,
Belgium.

STATE OF THE SECOND

BIG FRENCH STRIKE IS SETTLED

Twenty-Five Thousand Workmen Settle Their Differences With The Automobile Manufacturers and Return to Their Benches—Their Kick Over the Long Hours

Paris, May 21—Special cablegram—The strike of the workmen in the automobile factories has been settled and work has been resumed. Twenty-five thousand men were involved in the affair, while as many more in the allied trades were out. It is estimated that the strike has set the trade back fully a month.

Paris, May 9—The automobile trades' strike, far from tending towards a solution, is today more acute than ever. One after another, the smaller works are following the lead of the larger, for the most part forced into the war against their inclination. It is stated that the majority of the men are ready to start work again, and this fact has decided the masters towards a non-committal attitude.

The tour of France endurance test for motor cycles, tri-cars and runabouts has been postponed some 10 days as a precautionary measure, and this may be but a commencement.

Yesterday the members of the Chambres Syndicales de l'Automobile, des Mecaniciens, Fondeurs et Chaudronniers met. The situation was discussed at great length and in great calm and deliberation. From written evidence produced it appeared that the workmen were terrorized by small groups, and the meeting resolved unanimously to reply by a strong alliance as formulated in the following resolutions:

1—Absolute refusal to limit the day to 8 or 9 hours' work.

2—Refusal to consider the English week of 54 hours' work for 60 hours' pay and rest on Saturday afternoon and Sunday.

3—Absolute refusal to consider the change in the scale of wages to piecework or hourly basis. Many shops pay monthly.

4—Absolute refusal to abandon the system of special work for each man. This precludes the principle of shifts.

5—Undertaking to hire no men without the favorable opinion of the competent men's union.

6—Henceforth on the salaries paid the men employed in combined industries a tax of 2 per cent will be levied for the purpose of forming a fund for the protection of the employers against strikes.

On \$60,000,000 annually paid in salaries the fund would reach about \$1,200,000.

The French automobile trade was little affected by the strike until a week ago, and now, with a suddenness which needs some little explanation, the whole of the prosperous northwest of Paris, the hub of the trade, has been forced to admit that the state of affairs in their works is critical in the extreme. May is always

a favorite month for deliveries and the present crisis will throw the whole trade of the metropolis a month or more behind time. Among the works shut down are the following: De Dion-Bouton, 7,000 men; Krieger, with its annexed accumulator works, 2,000 men; Panhard, 4,500; Renault, 2,000; Clement, 3,500; Vedrine, 1,000; Darracq, 3,500; Mercedes' French works, 100; Hotchkiss, 750 men, not to mention the various accessory trades, carosserie, tire works, etc., which have been compelled to shut their doors in sympathy. The movement has not been confined to Paris. It is almost universal throughout France.

It really started some 2 months ago at the Léon-Bollée works at Le Mans, and has been smouldering ever since. However, a fortnight ago it was impossible to predict with certainty the stand that would be taken by the men. A walk through any of the big shops showed a most promising state of affairs with apparently contented and well-paid skilled workers carefully and conscientiously fulfilling their tasks. As a matter of fact, the men were not badly paid. Skilled workers make, with occasional overtime, \$1,000 to \$1,200 per annum, which, considering the small cost of living in France, or rather the few wants of a French workman, is equal to 30 per cent over this figure in the most favored districts of the United States. The hours, however, have remained long, and French masters have yet to realize that the most economical labor of a man is limited to about 8 hours. At least, if they realize the fact, it is not put into practice, for Frenchmen throughout the trades work 10 to 12 hours daily. A great strike in the automobile and allied trades was certain to come at some time or other, but by remaining quiet and by making small concessions the masters had been able to avoid threatening danger.

The men claim a 54-hour week instead of 60 to 65 hours, and while a few firms have agreed to the concession, the majority hold to the old hours. Again, a popular cry of the men is for a week's work, as in England, that is, Saturday afternoon free as well as Sunday. This is an old cry here with all sorts of trades, and, if the government offices and banks were to show the way, the remainder of the trades and business houses, in Paris at least, would follow suit.

Naturally, the men want more wages, their demands varying from 5 per cent to 15 per cent, and 1 hour thrown in per day; that is, 10 hours counting as 11, for instance. One of the best known employers at Puteaux replied to the request

for a 15 per cent increase by stating that having done \$4,000,000 worth of business this year, the profits had been but \$20,000, and in consequence interest on capital had barely been met. This was the signal of a general cessation of work by a clique and the movement led to a shut down in the neighborhood.

The whole district, for 10 days now, has been guarded by detachments of military, as well as the policemen, and wayfarers are warned that if they proceed along certain routes, it is at their own risk and peril. In the busy northwestern district, just outside Paris' walls, are encamped some 8,000 soldiers, and in parts of Paris are still detained certain regiments.

The general impression here is that the men are killing the goose which lays the golden eggs. As a matter of fact, a great many of the men in certain of the best known automobile establishments-that is, those who have grown up with the firmare hopelessly spoiled by the good treatment they receive. The average pay for a skilled mechanic in the shops is 20 to 30 cents per hour, and in the case of the men above referred to this pay has been placed on a monthly basis and the men have become used to the regime and do not know when they are well off. The cost of living for French workmen, whose wants are small and who have absolutely no appearance to keep up outside working hours, is 25 to 30 per cent less than that in any of the larger towns in the states. Thus, an ordinary unskilled laborer earning but \$30 a month, usually manages to save enough to provide at least in part for his old age.

As regards the duration of the strike, it is to be feared that the firms will be compelled to come to a compromise with the men. Hundreds of cars are scheduled for delivery this month.

Frenchmen are quite aware of the fact that this strike is most disastrous at the present moment, and it is very likely that it will affect the time of delivery of certain cars taking part in the fixed sporting events of the year. Some of the cars for the grand prix will perhaps be late in delivery, although these cars are nearly all out of the shops. The industrial vehicle concours may in consequence be put off, as most of these cars are being specially constructed for exhibition at the textile exposition at Lille in June and July. Another result of the strikes is the placing of immediate orders with Italian firms. The winning of the Targa Florio by the Itala has brought the Italian competition once more to public attention, and Genoa and Turin are already beginning to feel the results of the boom. Orders will also find their way to Great Britain and perhaps to the United States, but scarcely to Germany, whose products are not liked in France, apart from the old national jeal-

The racing of the motor boats at Palermo has now been postponed, owing to the strike retaining numbers of concurrents at Marseilles and other ports. Again, the Darracq, Hotchkiss and one or two other French competitors for the Targa Florio were rather late in leaving Paris for Sicilian territory and got nipped by the strike on the French frontier, where they are still. French opinion is rather aggrieved at this, for it is felt that the sparkling victory of the Italian cars was in a measure due to the non-arrival of the French champions.

The total number of men on strike in the automobile and allied trades at present cannot be less than 60,000, and the number increases daily. The great loss which the French automobile trade is undergoing may easily be calculated when it is remembered that every man in an automobile factory represents one car per year. This is the rough rule of the trade, so a factory employing 2,000 hands expects a production of 2,000 cars per year. Thus, for these works, lost time means lost cars, for it is impossible in this trade to do much in the way of making up for lost time, as two shifts cannot often be employed to advantage, as each man has his special task, which he takes up where he

NAPIER DEAL IN DOUBT

London, May 12-Some hitch appears to have arisen in the matter of the flotation of Napier & Son. In any event no information is forthcoming and it is stated that the conversion may not after all be effected. The present is certainly not a very opportune time so far as public subscriptions go, since the trouble over the Electrobus flotation has put the public in a rather antagonistic frame of mind. It appears that \$500,000 was subscribed, but many subscribers demand their money back, and in order that there may be no hanky panky about it, these dissatisfied subscribers have taken the matter into court. This squabbling is also preventing the appearance of the Gearless Bus Co.'s prospectus and generally influencing . quieting effect on the whole financial market. This market threatened to become so brisk that an enterprising man has started a sort of bucket shop for dealing in motor shares and motor shares only. The scope for a business of this kind appears so slight that in all probability there is something more in the scheme than appears on the surface.

NO STRIKE IN ENGLAND

London, May 11—The strike in the French motor manufacturing trade has not up to the present affected trade on this side, and it is generally considered that the dispute will be settled by a compromise which will end the matter before it greatly inconveniences the public. The leading British manufacturers are very busy. Daimlers have 200 cars to deliver that are now paid for. The Wolseley company has over \$1,750,000 of cars on contract for delivery before August, and so on.

FIRST OF YEAR'S TOURS

Contest for Milan Gold Cup Starts in Italy, Forty-One Cars Taking Part in Affair

Paris, May 16-Special cablegram-The first big tour of the year is now under way, the contest for the Milan gold cup having started from Milan last Tuesday. The tourists will be on the road 11 days, in which time they will cover about 2,425 miles and will fight for something like \$30,000 in prizes. Fortyseven cars were nominated for the affair, and forty-one started. The stop at night was at Bologna, a distance of 270 miles. It proved fierce going and seven cars were put out of business. Allen Grigg, in an English Daimler, Schlossehaue in a Diatto-Clement, and a Marchand, Mercedes, Peugeot, Rapid and Zust met with mishaps. The Daimler and Diatto-Clement both went into ditches. The machinist on the latter car was badly

All along the route were great crowds and at some of the villages the peasants were decidedly hostile. Near Brescia a woman stood alongside of the road and dashed water on the tourists. Macdonald in a Napier was the first to reach Bologna, being followed by Cagno in an Itala, Marsaglia in a Zust, Coquard in an Aries, Lanfranchi and Galli in Florentias, Lancia in a Fiat, Trucco in an Isota-Franschini, Vercellone in a Diatto-Clement and Bentler in a Martini.

Running out of Naples only thirty-one were in line, seventeen having withdrawn from the contest. Macdonald again led off, the weather being miserable, a rain taking all the sport out of touring. Accidents have been numerous, one of them near Margiliano resulting in what is expected to be mortal injuries to De Pasquale, who drove a Benz. His machinist, Fischer, was slightly injured.

The Milan gold cup circuit is divided into eleven stages, as follows: Starting from Milan May 14, Rome was reached on the 15th and tours are made in the district around Rome and Naples until May 18, when Florence is reached, from whence the itinerary passes to Genoa and Turin and back to Milan on May 21. The remaining trips are around the Milan district. The entrants included forty-seven cars and besides the best known Italian firms, eleven in all, there are four French, three German and two British, as follows: The Mercedes, Napier, Glentworth, Leader, Rapid, Daimler, de Dion, Kriéger, Clement. Other foreign makes are represented either by cars made up in Italy under their systems and in their Italian works, or by in ported cars. A maximum speed of 25 miles an hour is allowed and a regulation forbids stops on the road to diminish the average speed. Italian road regulations allow this maximum speed which is not

be easy to exceed, in view of the hilly nature of the course. The prizes offered for this race are evenly distributed over four different classes, having prices of chassis as a basis. Interest is added to the affair through the fact that several of the world's best race drivers, including Cagno and Macdonald, are taking part, showing that manufacturers are coming to believe that tours are fully as important as international road races from an advertising standpoint.

WANT GOVERNMENT CONTROL

London, May 12-A very strong attempt is being made by automobile leaders here to induce the government to institute a government department for the control of the administration of the trunk roads through the country. At the present time there is a grant from the imperial exchequer for this purpose, but it is left entirely in the control of local bodies, with the result that it is merely used to relieve the rates with but little consideration at times for anything else. It is argued that if the application of this money were rightly directed the construction of road surfaces would take a more progressive turn than has been the case up to the present, and that a portion of it would rightly and should rightly be devoted toward discovering a method of dustless construction. The Society of Motor Manufacturers and traders has been able to induce the council of the London chamber of commerce-by far the most important and influential body of its kind in the kingdom-to place a resolution on its minutes to that effect.

TEST OF GEARLESS CAR

London, May 12-The gearless car has arrived in the shape of a six-cylinder Napier, the advent of which has been expected for some time. It was put through a series of tests extending over 1,000 miles under the auspices of the automobile club last week, coming through satisfactorily. It was driven from London to Bexhill-on-Sea, where it was tested for high and low speeds on the track there, registering 41/2 miles per hour for the slow speed and just under 60 miles per hour for the top speed. As it was afterward driven from Bexhill to London, London to York, York to Edinburgh, Edinburgh back to York and York to London entirely on the throttle, it has to be admitted that the superfluity of the gearbox in a car of its type was amply demonstrated.

MAY POSTPONE BIG TOUR

Paris, May 21—Special cablegram—There is a chance that the Circuit European may not be held this year after all the elaborate plans that have been made. Even now there is a movement on foot to postpone the big event until the middle of next summer for the reason that the promoters find they will not be able to have everything in readiness by July 29, when the tour is scheduled to start.

HILL-CLIMBS HAVE AN INNING

Minneapolis Runs Off Successful Meet in Which Freak Steamer Stars-Cincinnati's Affair Draws Out Big Crowd-French Club Out of the Vanderbilt Race

Minneapolis, May 19-The Riverside hill-climb of the Minneapolis Automobile Club was a record-breaking affair in many ways today. A new time mark was established, the hill being negotiated in 32% seconds by a freak steamer. A speed record for the running off of events was also made. Six classes, with forty entries, were run off in less than an hour and a half. Car after car came up the crooked hill, negotiated the crest and shot over the tape, without a mishap or a hitch at any point in the program.

"Twenty-three is coming," would sing out Secretary R. J. Smith at the finishing

line telephone;

"She's off." and the three timers with receivers at their ears would start their watches.

Twenty-three's dust would not be laid before 24 was over the starting tape. The classes were well filled up, and it was a notable fact that only three of the printed entries were scratched. One of these was the 75-horsepower Kansas City car entered by L. H. Fawkes, and great disappointment was expressed that it was not received in time to compete in the climb.

The best time of the day was made by a 41/2-horsepower steamer built and run by N. C. Wilson. It was entered in the freak car class, and was built after the general bullet type. The car tore up the hill at such a speed that spectators held their breath, and it came within an ace of hurling its occupants over the steep river bank at the last turn.

A 35-40-horsepower Pope-Toledo, entered by H. E. Pence and driven by George Soules, was the star performer of the day in the regular classes. This car pushed over the finishing tape in 37% seconds. Right behind came a 50-horsepower Thomas Flyer, entered by J. J. Barclay, and driven by William Knipper, which negotiated the distance in 38% seconds.

The Riverside hill is a particularly trying one for drivers. It lies along the east side of the river. To the right of the driver, going up, the bank goes sheer down for nearly 100 feet at the summit. The parkway is a narrow one, laid out by the park board in a pretty winding fashion, but extremely disconcerting to the man behind the goggles. The hill has a total elevation in the 1,990-foot course of 76 feet. Crowds of people were lined up along the roads yesterday, and hundreds of machines were packed into the nearby streets and parkways.

The Pope-Toledo and Thomas which put up the strongest showing were entered in class 4, the class for gasoline stock cars listed at more than \$3,000, tonneau attached, and carrying two persons. The 35-horsepower Peerless, entered and driven by Charles Meyers, touched the 40-second notch, and was the first car to put up a flat 40-second mark.

Some fast time was made in class 3, for cars listing from \$1,500 to \$3,000. The 24-30-horsepower Mitchell carried off the honors, with only a quarter-second to spare over a 28-horsepower Olds. The former machine, driven by Erne Simpson, made the hill in 431/2 seconds, while the Olds, entered by J. J. Barclay and driven by William Folberth, made it in 43% seconds.

The Fords made a good showing in this class. E. J. Phelp's 40-horsepower sixcylinder, driven by W. H. Wheeler, covered the hill in 44% seconds, and another 40-horsepower Ford, driven by George Door, made it in 451/2 seconds.

The \$1,200 Buicks tore things up in the class 2 event, for cars listing from \$800 to \$1,500. Three two-cylinder, 22-horsepower Buicks were entered in the event. The first, driven by H. E. Pence, made the hill in 511/4 seconds; the second, driven by H. J. Mich, cut this to 47 seconds, and the third, driven by E. L. Weiant, made it in 481/4 seconds. No other car in this class cut under the minute mark, the best performance being that of the 20-24-horsepower Jackson, driven by J. S. Spargo, which made it in 1:011/8. The summary:

Class 1—Won by Gus Ringlund, 10-horse-power Cadillac; time, 1:15 %. F. M. Over-hout, 14-horsepower Wayne, second; time, 1:24; W. C. Thornehill, 8-horsepower Reo,

1:24; W. C. Thornentii, 8-horsepower Reo, third; time, 1:25.
Class 2—Won by W. H. Wheeler, 22-horsepower Buick; time, :47; H. E. Pence, 22-horsepower Buick, second; time, :48¼; E. N. Young, 22-horsepower Buick, third; time,

Class 3—Won by C. C. Evans, 24-30-horse-power Mitchell; time, :43½; J. J. Barclay, 40-horsepower Olds, second; time, 43¾; E. J. Phelps, 40-horsepower Ford, third; time,

Class 4—Won by H. E. Pence, 35-40-horse-power Pope-Toledo; time, :37%; J. J. Barclay, 50-horsepower Thomas, second; time, :38%; Charles Myers, 35-horsepower Peerless, third; time. :40.

Class 5—Won by N. C. Wilson, 4½-horse-lower Wilson Racer; time, :32%; George W. Chaplin, 40-horsepower Royal, second; time,

Class 6-Won by R. Douglas, 20-24-horse-power Jackson; time, 1:02 %.

CINCINNATI HILL-CLIMB

Cincinnati, May 19-With 5,000 people looking on, the hill-climb of the Cincinnati Automobile Club was held today on Paddock hill, a winding incline about % mile in length, with a surface that was decidedly slow. Five events were run off, the best time being made in the free-for-all by O. F. Pogue in a 24-horsepower Packard, who went up in 61 seconds. A Franklin runabout won the opener, a Franklin touring car the second and a Pope-Toledo

won the third and fourth. President Val Duttenhoeffer, Jr., managed the affair, which went off without a hitch.

Class 1, runabouts—Won by A. R. Morgan, Franklin; time, 1:26. A. G. Brunsman, Stod-dard-Dayton, second; time, 1:30. E. J. Car-penter, Duryea, third; time, 1:50. Thomas P. Stack, Reo, fourth; time, 2:174-5. A. C. Anderson, Franklin, fifth; time, 2:45.
Class 2, touring cars, 12 to 24 horsepower—Won by H. F. Fulton, Franklin; time, 1:24.

Won by H. F. Futton, Frankin; time, 1:24. Miss Charlotte Allen, Stevens-Duryea, second; time, 1:29. L. W. Anderson, Bulck, third; time, 1:34. Sidney Black, Bulck, fourth; time, 1:37%. J. Baum, Bulck, fifth; time, 1:47. Robert C. Crowthers, Compound, sixth; time, 2:30%. H. C. Hoefinghoff, Bulck, seventh; time, 2:50.4.55. 2:30%. H. time, 2:50 4-5.

Class 3, touring cars, four passengersby F. F. Bradley, Pope-Toledo; time, 1:09. A. G. Brunsman, Stoddard-Dayton, second; time, 1:18¼. Albert Krippendorf, Pope-Toledo, and H. H. Hoffman, Pope-Toledo, tied for third; time, 1:20. Standard Auto Co., Pope-Hartford, H. H. fifth; time, 3:00.

Class 4, touring cars, four passengers—Won by F. F. Bradley, Pope-Toledo; time, 1:07. Henry Burkhold, Thomas, second; time, 1:23. J. G. Hughes, Stearns, third; time, 1:28 4-5.

Class 5, free-for-all—Won by O. F. Pogue, Packard; time, 1:01. W. W. Balks, Packard, second; time, 1:024-5. Albert Krippendorf, Pope-Toledo, third; time, 1:05½. F. F. Bradley, Pope-Toledo, fourth; time, 1:06. H. H. Hoffman, Pope-Toledo, fifth; time, 1:11. Henry Burkhold, Thomas, sixth; time, 1:14:1-5. J. G. Hughes, Stearns, seventh; time, 1:20. Sidney Black, Buick, eighth; time, 1:37.

HONORS TO THE ITALA

Paris, May 9-Italy's sweeping victory last Sunday in the Targo Florio, the first of the big international road races of 1906, is the talk of the continent, for the race was a battle between the two Latin countries in which France was worsted. Cagno, the winner, was formerly on the Fiat racing team with Lancia and Nazaro and before joining the trade was chauffeur to the dowager queen of Italy. Last year he finished second to Thery in the Auvergne circuit race. Cagno drove a 24-horsepower Itala, which ran one, two, four, five in this race, the finishers in which were as follows:

Name and car	Prize	Time
1-Cagno, Itala	.\$5,000	9:32:22
2-Graziana, Itala	. 1,600	10:05:22
3-Bablot, Berliet	. 800	10:20:05
4-Rigal, Itala	. 600	10:25:08
5-De Caters, Itala	. 400	10:38:26
6-Le Blon, Hotchkiss		12:09:23

As was anticipated, the Itala cars romped home easy winners over the 278mile tortuous course mapped out for the Targa Florio race. The result was not unexpected in view of the non-arrival of some of the principal foreign cars, among others the Darracq, the Mendelssohn and a Hotchkiss, delayed at Genoa owing to the strike among the dockers. Pope, in an Itala car, ran short of gasoline and couldn't get more in time to finish. Rigal, in another Itala car, and Bablot, on the only Berliet car competing, both lost their heads and let water run into the reservoirs in place of gasoline, with disastrous results. Bablot, however, made up lost time on the Berliet.

The 24-horsepower Itali, which won the event, has a four-cylinder motor with a 514-inch bore and 51/2-inch stroke. The valves are rechanically operated and the carbureter is regulated automatically from the flywheel of the motor. A Simms-Bosch magneto is used and the frame is of pressed steel. There is a 55-inch wheelbase. Four speeds, the last direct-driven, are furnished. Two hand levers, one operating the brakes on the rear hubs, the other the speed changers, are fitted. Three foot levers, two for the foot brakes and the third for the accelerator, are found.

In view of the great success attending the Targa Florio tourist race, Chevalier Vincenzo Florio has announced that the prizes for next year's events will be \$20,000, divided as follows: First, \$8,000; second, \$2,000; third, \$1,000; fourth, \$600; fifth, \$400; sixth, \$200, and in addition \$6,000 to the first equipment of three cars belonging to one firm. There are also prizes of sums amounting altogether to \$1,800, to be divided among the first arrivals at the end of each turn or completed circuit.

FRANCE OUT OF VANDERBILT

New York, May 22-Secretary Butler, of the A. C. A., told your correspondent this noon that the letter alleged to have been sent his club by the secretary of the Automobile Club of France announcing its withdrawal from any official participation in the Vanderbilt cup race had not yet been received. There is now, however, no doubt that such action has been taken by the A. C. F., for L'Auto, the official organ of the French club, reports in full a meeting of the A. C. F. governors held on May 2, at which the decision in question was reached. The A. C. F. has no objection to the participation of French makers as individuals in the contest, but insists that a team chosen under rules that do not recognize the preponderance of the French industry as do those of the grand prix would not fairly represent France. Chairman Thompson, of the racing board, only returned yesterday from a fishing trip in Canada. Mr. Thompson said he would call a meeting of the cup commission for next week, when the method of selecting the French cars will be discussed. He will go abroad early next month to view the grand prix contest and while there will doubtless settle finally the French team question along the lines laid down by the commission at its meeting next week. He will also see the British club with reference to a British team.

FAST DRIVE BY ROLLS

London, May 18—Special cablegram—Charles Jarrott's London-Monte Carlo record of 1,000 miles in 37 hours 30 minutes, made in a 40-horsepower Crossley car, has been beaten by a slight margin by C. S. Rolls in a 40-horsepower Rolls-Royce. The real feature of Rolls' drive, though, was his feat of doing the 711 miles between Monte Carlo and Boulogne in 28 hours 14 minutes, a pace of about 25 miles on hour. He lowered the old mark made by Jarrott by 3 hours 21 minutes.

ANOTHER BILL IS UP

Representative Sulzer of New York Introduces Good Roads Measure in Congress

Washington, D. C., May 19-There is no end to the number of good roads bills that have been introduced in congress at this session, showing conclusively that the clamor for good roads legislation from all over the country is being heard with an attentive ear by the national legislature. The latest aspirant for good roads fame is Representative Sulzer, of New York, who, like his colleague, Representative Hearst, seeks to promote the construction of good roads and the efficiency of the postal service in the United States. His bill provides that upon the application of the proper authorities representing any state or territory, the secretary of the treasury shall loan to such state or territory for the construction or improvement of post-roads within such state or territory and outside the limits of any city or incorporated village the actual cost of such construction or improvement. The provision is made that the construction or improvement of said post-roads shall be under the general supervision of the postoffice department and according to specifications approved by it, and the postmaster general is given authority to make all needful rules and regulations relating thereto. There is a further provision that one-twenty-fifth part of all money received from the federal government under the terms of the Sulzer act shall be each year returned to the federal treasury by the state or territory receiving the same until the whole amount received by any state or territory shall have been returned. No interest is to be charged upon money loaned under the Sulzer act when return to the treasury is promptly made, but interest at the rate of 5 per centum per annum is to be charged on all deferred payments. The president of the United States is to lay before congress at each session a statement of all proceedings under the Sulzer act. In the event of its enactment the proposed law is to take effect immediately.

This last move by Sulzer only goes to show that the motorists are becoming a real power in the United States. Hearst has shown that the congressmen are at last waking up to the pleas of the automobile fraternity, while the fight for the free alcohol bill is becoming one-sided through the advances made by the friends of the bill. From all parts of the country come demands to the congressmen and senators that they lend their support to the meas-Automobile clubs have pitched eagerly into the fray, one of the latest to put a shoulder to the wheel being Milwaukee, where its mayor, young Becker, has taken matters in his own hands and with characteristic vigor is stirring the Badgers up to action in the matter.

The Hearst bill has been given a strong send-off by the chain of papers owned by the congressman, while throughout the farming districts, where the Californian is popular, much favorable comment has been heard. It is more than probable that other congressmen will join in the movement and congress doubtless will have so many highway measures to consider that the law-makers will be thoroughly inoculated with the good roads germ before they are through with the subject.

FOR INTERNATIONAL RACE

New York, May 23-Special telegram-A cable from Paris in today's Herald states that at the request of the Automobile Club of Great Britain a meeting will be held on June 25, at the office of the Automobile Club of France, at Port De Gennen, on the eve of the grand prix race, to which all recognized automobile clubs are to be invited. The meeting will discuss proposals to be submitted by the Automobile Club of Great Britain on the subject of the coupe internationale. The chief proposals follow: That the coupe internationale shall continue to be a speed race, the number of automobiles representing each recognized national club to be limited to three, the length of the circuit to be approximately 50 kilometers, and the total length of the course to be approximately 500 kilometers; the machines shall weigh not more than 850 kilograms each and shall carry 150 kilograms of ballast, which may in no way form a part of the structure of the automobile. The club of Great Britain and Ireland considers that the above mentioned distribution of weights will do more to perfect touring machines than the limit of 1,000 kilos, as at present. Other proposals are that the entry fee be raised, vehicles to be driven by members of clubs taking part. Entries will close on December 31 of each year, no club to become the owner of the cup. The winning club will hold it in conformity with the stipulations stated in the regulations.

HERRICK STRICKEN

Chicago, May 23—William Herrick, head of the William Herrick Automobile Co., local agent for the Peerless, was stricken with paralysis on the left side of his body yesterday while lunching at the New Southern hotel. Up to 3 o'clock this afternoon Mr. Herrick had not regained consciousness and the doctors considered his case dangerous, although conceding him a chance for his life. Mr. Herrick was at one time manager for Morgan & Wright.

AFTER FRAYER-MILLER PLANT

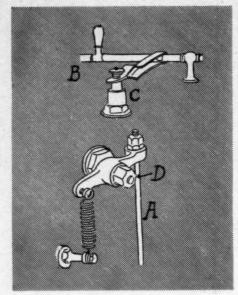
Columbus, O., May 20—President Oscar Lear, of the Lear Automobile Co., which makes the Frayer-Miller, says a decision will probably be reached this month on the proposition received from the board of trade at Zanesville, this state, for the removal of the company to that city.

PROMINENT MAKES OF FOREIGN CARS



The Peugeot

The baby Peugeot, for years the muchtalked-of little automobile of Europe and the car that made the name of Peugeot so widely known, has at last been dropped from the list of machines built by this French concern. In its place has been listed a series of five different models, a list abnormally large for an European firm, yet a most inviting one because of the gradual gradation of power in the different machines as well as the varied nature of the construction of the several models. The list comprises a 10-12-horsepower two-cylinder machine with a bore and stroke of approximately 4 inches; 12-16 and 18-24horsepower four-cylinder models and two large machines, one at 30-40 horsepower with cylinder measurements of 4% and 5% inches and the other at 50-60 horsepower and having the bore 6 inches and the stroke 51/2 inches. Making the bore or cylinder diameter greater than the length of the stroke, a practice with a large continental following, is pursued in the three highest-powered machines, whereas in the smaller cars these measurements are practically equal. In the illustrations on this and the following page are shown the leading points of the 30-40-horsepower machine, which is fairly representative of the firm's productions. In general assembly the diminution of parts has not been striven after. Rather attention has centered on making a most accessible machine, one in which the removal of parts is a small task and which inspection plates are numerous so that any trouble within the motor or gearset can be instantly detected. While multiplicity of parts is shown in the plan view of the chassis by enclosing the gearset in a case Z near the middle of the car and housing the jackshaft and differential

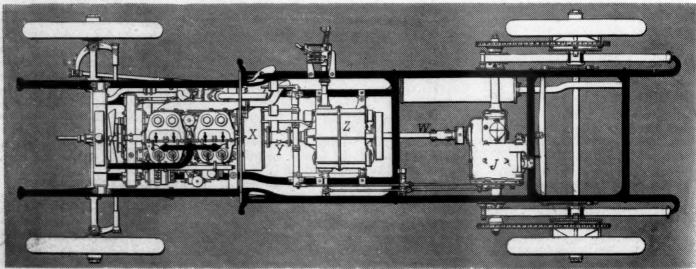


PEUGEOT MAKE-AND-BREAK

in another case J in front of the back axle, this trend is lost in the design of many of the detailed parts of the machine in which extreme simplicity exhibits itself. Particularly is this apparent in the make-andbreak mechanisms for the low-tension ignition where half the number of parts used in some other makes of machines suffice. If the Peugeot designer has used multiplicity of parts in one part of the car and few parts in others, the general view of the stripped chassis attracts because of the good distribution of the many parts, the pleasing arrangement of the motor and its accessories and the excellent distribution of the weight over the front and rear wheels.

Valves made interchangeable and placed

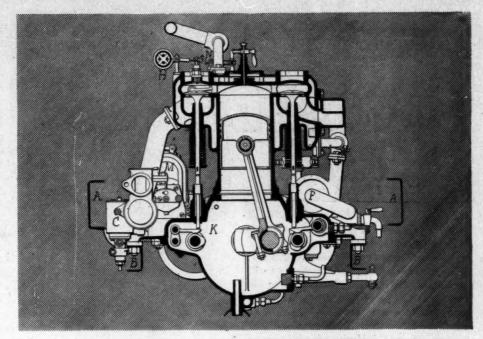
on opposite sides of the motor necessitating the use of two camshafts; integral castings for each pair of cylinders; high and low-tension ignition; speed under the control of a centrifugal governor located on the exhaust half-time gear and coupled with a butterfly valve of the carbureter; oiling of the crankshaft and cylinders by a plunger pump driven by an eccentric off the rear end of the exhaust camshaft; and the tops of the pistons slightly arched as are the tops of the combustion chambersin the hope of the oil not gathering as it would on a flat surface and the heated particles causing preignition, may be accepted as the distinguishing marks of the The end section indicates the method of interposing an intermediate arm K between the top of the cams on the camshaft and the bottoms of the lift rods to the valves. The underside of this lever has an expanded portion for resting on the cam, but a flat top for receiving the push rod. Although several extra parts are introduced by this design, still the maker hopes to more than offset this by the absolutely straight lift given to the valve lifters. Making all cams and the camshaft in one piece has not been followed, the building-up practice of keying the cams and also pinning them against end movement being preferred. Both camshafts have separate compartments in the side chambers of the crankcase, they being carried on separate adjustable bearing boxes well to the side of the crankcase, giving it a pronounced width. The inner sides of these camshaft compartments are open to the crankcase permitting the splash of oil entering. The exhaust camshaft carries the governor and drives the oil pump and the inlet shaft has a double set of cams; one set for the admis-



PLAN VIEW OF 30-40-HORSEPOWER PEUGEOT CHASSIS, SHOWING GEARCASE Z AND DIFFERENTIAL CASE J

sion valves, another for operating the make-and-break mechanisms. In housing the many motor parts a general balancing scheme has been followed so that both sides will carry their equal share. The motor itself reposes on a subframe B carried directly on the mainframe parts A. At the left is the entire mixture supplying and ignition outfit, including the Peugeot carbureter C with governor connections and Simms-Bosch low-tension magneto M, while on the opposite side is the simplified exhaust piping, the water pump P, governor and steering gear which rests beside the rear pair of cylinders. Every part of the motor is given a separate place, even to the half-time, pump and magneto gears on the front of the motor which are enclosed in a large housing with partitions dividing it into compartments and with inspection plates for each compartment.

If the magneto is to be removed as at M in the end section of the motor, it is necessary to take off one nut when a double clamping band, which passes entirely over the tops of the magnets, can be taken off. The magneto shaft has a simple jaw coupling with its gearshaft allowing of the device being lifted out of position once the clamping bands are removed. In the make-and-break parts, the current from the magneto is distributed to all four cylinders by a bus bar B shown in the view of the make-and-break parts. From this current passes to the igniter plug C piercing the top part of the cylinder. The plug D entering the side of the cylinder carries the rocking arm within the cylinder which effects the make-and-break. A rod A from the inlet camshaft serves to pull the right end of the double arm lever of the rod D down against the tension of the coil spring pulling down on the left end, but as soon as the cam has passed, the coil spring immediately exerts its pressure, causing the break. In the caps over the inlet valves is held the spark plugs S used for the hightension system, the current for which is supplied from a set of storage cells and passes through the usual vibrator coil and

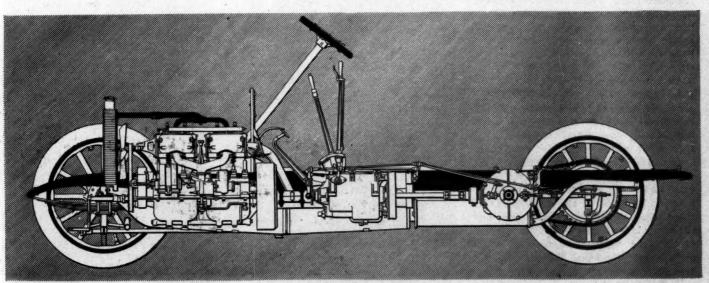


CROSS SECTION OF PEUGEOT MOTOR AS SEEN FROM DASH

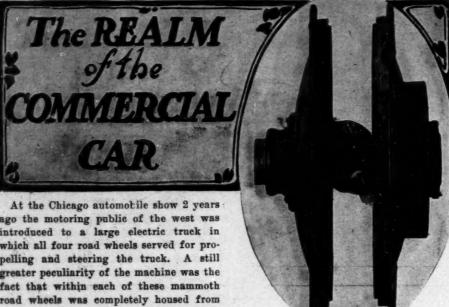
is then distributed to the four cylinders. In the carbureter are three separate chambers, all of which might pass for a float chamber. They are arranged somewhat pyramidically, except that the top chamber is a little to the right of the bottom pair. This top one is an air-diluting chamber and has an opening adjacent to the exhaust pipe, in this way securing hot air. The chamber has on top a hand-controlled valve by which cool air may be taken in and mixed with the hot, giving air of any desired temperature, according to the weather or the needs of the motor. The remaining two chambers are a float chamber on the outside and a mixing chamber close to the motor. They are of accepted design. The governor operates on a throttle valve in the short pipe above the mixing chamber and which immediately above the throttle branches into two parts, one to each pair of cylinders.

From the motor to the back axle the power goes through a chain of communi-

cants; first a leather-faced cone clutch; second a short shaft to the gearset; third a four-speed and reverse selective gearset; fourth a propellershaft to jackshaft encased in a separate housing; fifth the jackshaft with its differential, and lastly roller chains on each side connecting with the back wheels. The gearcase, a squareshaped aluminum housing, has the entire top removable for inspection and takes its support on the subframe pieces carrying the motor. Changes in speed are made with three shifting rods, all operated by one side lever working in a three-slot quadrant, the lever passing freely into the four slots for the forward speeds, but being locked against entrance into the reverse slot, a knob on the leverhead having to be pressed before the reverse can be thrown in. Direct drive is on the top speed. All shafts within the case revolve on the Hess-Bright type of ball-bearing. In the differential and jackshaft only ballbearings are used.



SIDE ELEVATION OF PEUGEOT 30-40-HORSEPOWER CHASSIS, SHOWING DRIVING SCHEME AND PARTS



MOTOR IN COUPLE-GEAR WHEEL

ago the motoring public of the west was introduced to a large electric truck in which all four road wheels served for propelling and steering the truck. A still greater peculiarity of the machine was the fact that within each of these mammoth road wheels was completely housed from sight a 2-horsepower electric motor, leaving as the only evidence of motor drive about the machine the battery of forty cells carried on a dropped framework beneath the center of the platform and the few controlling devices. The machine was manufactured under the license of the Holson Motor Patents Co., Ltd. Since that date, almost 21/2 years ago, little has been heard of the truck that was built for a useful load of 5 tons. It has, however, recently come to life and is now being built by the Couple-Gear Freight Wheel Co., of Grand Rapids, Mich. At this point a large factory has been erected and the trucks in considerable numbers will be built during the present year. Few changes have been made in the general appearance of the machine since taken over and manufactured by this concern under license of the Holson Motor Patents Co. The immense disk wheels with rubber tires are retained; a style of body of the heavy lattice side remains; a steering wheel reposes on the top of a vertical column, the bottom of which communicates by small bevel gears with the steering gear connecting with the four road wheels; a heavy semi-elliptical spring suspension still exists in front and rear; location of the controller remains practically the same, and body dimensions in general have been unaltered.

As previously mentioned, each of the four wheels carry a 2-horsepower motor, aid in steering and have a brake attached. For a vehicle with capacity for carrying 5 tons, each wheel contains a 2horsepower motor which is capable of heavy overload and which, while driving the car at 6 miles per hour, revolves at the very high speed of 1,400 revolutions per minute. By means of the couple-gear this speed is reduced twenty-five to one, and the motor is connected directly to the rim of the wheel without intermediate shafts or bearings. The equal division of power between two opposite points on the wheel rim relieves the driving pressure from the

axle, just as the pressure is relieved from a watch stem by using both the thumb and finger in winding it.

Practically the full power developed by the motor is had between the face of the rubber tire and the road, avoiding most of the mechanical losses which result when the motor is attached to only one side of the wheel, and when the speed reduction is accomplished by means of secondary shafting. This saving increases the radius of travel on one charge, and also decreases the demand on the storage battery. The solid wheels are formed of two dish-shaped pieces of 1/4-inch boiler steel, and to the edges of these are bolted the large gear racks in which the two armature pinions travel. The illustrations show the two sides of the wheel abnormally separated to illustrate the inclined position of the armature which enables it to deliver its. force in opposite directions to longitudinally opposite points on the rim of the wheel. An equalizing device opposite the commutator insures an equal division of the power between the two pinions regardless of adjustment. The field casting, which has been removed to give a clear view of the armature, is elongated at both sides to form the axle stubs; the inner one, extending through, is keyed into the steering knuckle and through its center the wires are conducted to the motor.

The outer wheel-disk has two circular doors which give easy access to the motor brushes and bearings, and when closed the motors and gears are perfectly protected from the dirt and dust of the road and are working under the most ideal conditions. To the inner wheel disk is riveted a 16inch brake band. The rubber tire rests over a steel band which fits between and spaces apart the sides. The wheel is fastened together by a series of bolts which pass close to the steel band just beyond the ends of the pinions. By loosening these bolts the outer side of the wheel is quickly removed and the armature can be lifted out.

The complete couple-gear truck is shown in the illustration climbing a grade which would be prohibitive to any vehicle not utilizing the traction of all four wheels and not having sufficient leverage efficiently provided behind the little high speed motors. The battery in the vehicle shown is an Exide M. V., fifteen-plate, forty-two cells, and will drive the car from 45 to 50 miles empty on good level roads. The total weight of the truck is 8,000, and under the most favorable conditions it consumes only 30 amperes and runs nearly 7 miles an hour on reasonable surfaces.

The speed under load is decreased sufficiently to meet all emergency pulls and

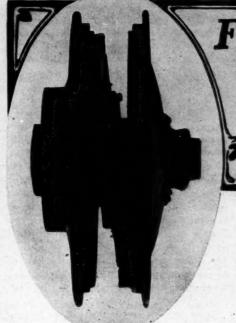


FIVE-TON, COUPLE-GEAR, FOUR-WHEEL-DRIVE TRUCK

to navigate the heaviest city grades without overheating the motors or doing any damage to the ordinary storage battery. In starting and gradually acquiring full speed, there is no excess demand on the battery, and no jerking or straining of the parts. The controller is of the cylinder type and gives five speeds forward and five speeds back. Steering can be done equally as well in either direction and the narrowest streets afford ample room for turning around without the necessity of backing. As the driving is divided equally among the four wheels there is no undue strain on any of the tires and all slipping is avoided even on wet surfaces.

Los Angeles, Cal., was one of the slowest cities on the continent to take up commercial vehicles. The city is located right for motor commercial vehicles, for the weather is open most of the year. The use of pleasure vehicles there is greater than in any other city on earth, as over 3,000 automobiles are now owned and practically used every day in the city. There is no rain from May to October and very little in the winter, usually for not more than 3 days at a time. The business streets are paved and the city, where heavy trucks will be used, is level.

There was some experimenting with commercial vehicles several years ago and with crude machines. Naturally, these poor vehicles were not satisfactory. Two years ago a concern was incorporated to do general delivery of goods for the retail stores. The corporation hunted out the cheapest commercial vehicles obtainable and took off part of the bodies, fitting delivery tops. The work of these cars was all over the city, and especially in the hilly districts, so in a short time the cars were worn out and the experiment was a failure. About the same time a number of retail establishments purchased inadequate electrical vehicles, which would have



COUPLE-GEAR WHEEL WITH MOTOR

been of little value anywhere. This experiment, naturally, was a failure. About a year ago one of the breweries purchased two large electrical trucks and put them in charge of ignorant drivers, who were able to take care of horses well but knew nothing of mechanics. They did not oil the bearings of these trucks in the several months that the brewery used them. The battery charging was done by these men, who also made a failure of that.

Early this year there was incorporated in Los Angeles a concern to do freighting and truck business with automobiles, under the name of the California Auto Dispatch Co. It now has seventeen electrical trucks, many of them of 5-ton capacity, or even greater. The large trucks have 7inch Firestone solid tires. The other cars



These big trucks ply about the streets so regularly that no more attention is paid to them than to the electric street cars. They do not even attract the attention of the various pleasure automobiles. company is adding more trucks as fast as it can get them, and just at present is trying an experiment with the new Olds trucks and other types that are offered.

teries, battery work and repairing is in

the hands of expert mechanics and elec-

tricians, so there is no trouble with its

trucks. In the wholesale districts of the

city these electric trucks naturally have

the preference and the company is rushed

with work all of the time, because it can

deliver goods so much quicker and better

than is done by the horse-drawn trucks.

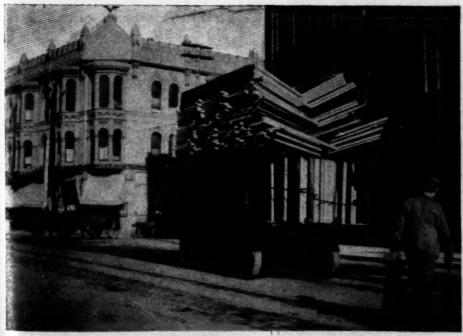
The big trucks average in their hauls above 10 miles an hour. One of the trucks is fitted for hauling safes and has a separate motor under the seat front, and tackle arrangement for hauling the safes. out of stores onto the bed of the truck. The electric motor is also used for lifting safes into buildings where they cannot be carried up stairs or taken in elevators.

Two of the large electric trucks owned by this same concern are equipped as rubberneck wagons and make daily sightseeing tours from leading hotels with tourists, carrying forty or fifty people in each of the vehicles.

MOTOR WAGON STREET ECONOMY

Chicago has in daily travel upon its streets 60,000 horse-drawn vehicles, consisting of four, three, two and one-horse wagons. These various vehicles are used for doing the street teaming of the mercantile houses; attending to the varied delivery needs of the hosts of retailers; transporting the raw materials to the factory and the finshed product to the warehouse, retailer of railroad depot; attending to the unending currents of express packages, baggage and mails; and the myriad other uses that horses are put to in the daily life of an immense city.

To these almost innumerable horsedrawn wagons and buggies is attributable the congestion of so many of the downtown streets of the Windy city. Within



CALIFORNIA AUTO DESPATCH CO'S. 5-TON TRUCK



HORSES OBSTRUCT THE ALLEY

the "loop" a district, eight blocks long and five blocks wide, covering in all forty blocks or squares, the congestion at the corners is maddening, requiring the presence of policemen at each corner whose duty consists in stopping the travel along one street while the traffic along a cross street is permitted to go by, the pedestrians passing at the same time.

The introduction of commercial motor vehicles would remedy this. Were Chicago a horseless town for a single day, were every vehicle on the streets propelled by one type or other of modern motors, then on that day the congestion of the streets would be one-sixth that of the other days. The work done by the 60,000 vehicles could be done by 35,000. Each of these 35,000 vehicles could travel, in fact, would travel at double the speed of the horse-drawn wagons. Each of the 35,000 would be capable of carrying double the load of the horse wagons, where merchandise is transported. Each of these wagons would occupy but little more than five-eighths of the space of the other horse-drawn machines.

A three-horse coal wagon measures 31 feet from the tip of the poles to the back of the tail board. An electric truck, carrying the same load or 2 tons more, if needed, measures but 19 feet. This one vehicle indicates a saving of almost one-third of the street space needed for coal transportation. A two-horse express wagon measures 23 feet from the front

end of the pole to the back of the tailboard. A gasoline motor wagon carrying a load of 2 tons measures but 15 feet. Here is a doing away of one-third of the space occupied by the wagon in the express field. Users of motor wagons in express business make double the distance each day they did with horses and the load is in most cases one-half greater. From actual measurements of heavy twohorse freight wagons made at the Santa Fe depot, the average length was 26 feet, 15 feet for the wagon and 11 feet for the horses. Measurements made of electric 5-ton wagons at the same depot gave their total length as 18 feet from the end of the tailboard to the front of the footboards in the driver's platform. Here was a curtailment of almost one-third in the street area occupied by scores of teams waiting their turn to unload and load at the various platforms of the freight depot.

Measurements were taken of the lengths

measured 16 feet; a 2-ton gasoline truck, 15 feet; four 1½-ton gasoline delivery wagons, with enclosed tops, 12 feet each; three 1½-ton gasoline trucks, 14 feet; four other similar 1½-ton trucks, 16 feet; one 3-ton gasoline truck, 15 feet 6 inches; an 18-horsepower, 4,500-pound canopy-top gasoline wagon, 14 feet; largest size of electrics for furniture delivery, 19 feet; 1-ton enclosed gasoline delivery wagon, 10 feet 8 inches; large gasoline piano delivery wagon, 13 feet 6 inches.

These figures, when compared with those for horse-drawn vehicles of the same load capacity, tell of a cutting off of one-third of the occupied space. Along a city block, ½-mile to the side, forty-four 2-ton gasoline motor trucks could be stood end to end. Only thirty two-horse wagons would occupy the same space. The forty-four motor trucks would be reduced to forty-one, if each truck was made to carry a 3-ton load. Along one side of the same block is room for a line containing fifty-



ELECTRICS CARRY DOUBLE LOADS AND OCCUPY LESS SPACE

of several delivery and one-horse express wagons standing along the sidewalks. A plasterer's wagon measured 21 feet; the same measurement held true for a meat wagon; an enclosed delivery wagon measured 20 feet; several one-horse cabs measured 19 feet from horse's nose to center of the back tire; the hansom, smallest of the horse-drawn vehicles, was 17 feet from front of horse to back of body. Numerous measurements made of vehicles standing along sidewalks were made, all of which told the same story of too much street space occupied by standing vehicles as well as too much space required for moving vehicles.

Compared with these horse-drawn figures are those taken of commercial motor wagons, found in alleys, by sidewalks, moving along the streets, at depots, by factories and making deliveries on residential streets. A 3-ton gasoline wagon

five 1-ton enclosed gasoline delivery wagons, yet it would supply space for only thirty-three one-horse delivery wagons. In the pleasure vehicle line a two-passenger electric runabout measures 8 feet from front to rear; a one-horse cab, 19 feet. Placing these runabouts along one side of the block, room is found for eightytwo, yet there is only accommodation for thirty-five two-passenger cabs, the runabout cabs measuring 19 feet. If hansoms, 17 feet extreme length, were used, only thirty-eight could be accommodated. The story of comparison with the little gasoline runabouts and gasoline touring cars holds sufficiently good with horsedrawn vehicles. These vehicles tell another chapter of crowding city streets with horses and vehicles when the motor vehicles would eliminate the congestion.

This for the streets. The alleys have their tale to tell. In the rear of a large furniture store were found two immense electric wagons being loaded with furniture. Side by side with them were two two-horse teams. It was the noon hour. The electrics, motionless, stolid and impressive, occupied a space of 15 feet out from the loading platform, leaving the alley in front of them free for the passage of horses. The horses on the other two wagons were angled along the alley, one team towards the trucks and the other from them, the drivers thereby hoping to prevent the horses' heads and the wagon poles from obstructing the 10 feet of alley width supposed to be left free at all times for the passage in and out of loaded or empty wagons. Do what they could the horses infringed on this space. The trucks did not; instead they had several feet to spare on the standing platform shown in the illustration by the iron plate marking the line between the loading platform and the alley. Soon a wagon loaded with mat-

MOTOR MILE MARKS



Asbury Park Service—A. S. Hickley, of Allenhurst, and W. H. Schaffer, of Asbury Park, N. J., have formed an electric transfer company, and will run an automobile bus service in Asbury Park.

Orders Baggage Wagon—The Toledo Transfer Co., of Toledo, O., has taken steps toward installing a motor transfer line, having already ordered a 30-horsepower baggage wagon to be used between hotels and depots.

Fills Trolley's Place—The East Jersey Motor and Transportation Co. has been incorporated at Elizabeth, N. J., with a capital stock of 100,000. It will operate automobiles between that city and Rahway and Roosevelt. The company is the result of a failure to build a trolley line

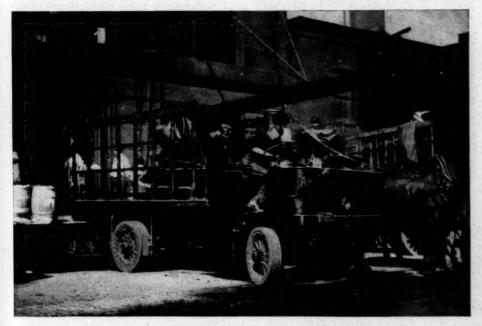
suspicion. The department is of the opinion that for its special work of this kind such a machine is better than the regular police patrol.

Progressive Auditor—County Auditor David T. Davies, of Toledo, O., has the automobile fever. He wants the county to purchase an automobile ambulance, to be used exclusively by the county.

For Collegians—A company has been formed to run an automobile line from Bryan, Tex., to the Agricultural and Mechanical college. A twenty-passenger bus has been ordered and a regular schedule will be maintained.

Gray Line Going—Chauncey W. Gray, of Watertown, N. Y., has begun his automobile service upon the streets of that city, where the street cars do not run. The cars leave the public square every 20 minutes during the day and evening.

Using Logans—The first automobile express company to be established in Denver has been inaugurated by the Denver agency of the Smith Automobile Co., which recently opened at 1420-22 Court place. A consignment of Logan 10-horse-power, air-cooled delivery cars, with and without tops, has been received and is attracting much attention throughout the city, as they are the first of their sort to be used there. The agency, which is in charge of Raymond Smith, will do all the western business for the firm and will handle its cars and the Logan.



STEAM TRUCK REQUIRES LESS SPACE THAN HORSE VEHICLE

tresses reached the alley. It could not pass the horses' heads, the pole of the wagon interfering. The horse had to be swung still more to the side and the pole raised partly over the neck of one of them.

In another visit a large steam truck, capable of a 6-ton load, was being loaded on a street from a warehouse platform. Side by side with it were horse-drawn vehicles. With the truck backed squarely to the platform there was considerably more street room left than with a two-horse wagon, which was backed to the platform and had the horses turned almost at right angles to the body. The saving of space of the motor wagon was most apparent.

At no places, other than at street crossings, does the congestion of horse vehicles appear more than around railroad incoming and outgoing freight depots. Here it approaches its zenith, and here the motor truck is specially applicable.

between these places. By June 1, four automobiles, each with a capacity of twenty persons, will be in operation.

Hub Venture—The Lexington and Concord Sightseeing Co., Boston, Mass., has been incorporated with a capital stock of \$10,000, to carry tourists in automobiles. Incorporators: President, George W. Taylor, Lexington; treasurer, H. F. Knight, 50 State street, Boston, Mass., and clerk, A. F. Johnson, Saugus.

Police Department Experiments—The city of Syracuse, N. Y., is experimenting with a Franklin touring car in the police department and will probably decide to add it to its equipment of automobiles. This car was the means of running down metal thieves, who were followed by the policemen in the machine. As nothing about the car indicated that it belonged to the police department, it awakened no



How the Horses' HEADS INTERFERE

utomobile

Chree Jackson Models



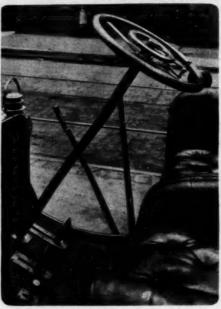
Model C, 20-24 horsepower, with two opposed cylinders carried lengthwise underneath the center of the body, two-speed and reverse planetary gear transmission, single chain drive, 90-inch wheelbase, 30 by 3½-inch tires, channel steel frame, 1,750 pounds weight and five-passenger accommodation as its features, is the smallest of the trio of Jackson cars for this season.

Model D, 20-24 horsepower, with two opposed cylinders carried crosswise in front under the bonnet, comprising the motor, two-speed and reverse planetary transmission, shaft drive, 100-inch wheelbase, weight 1,900 pounds, 32 by 3½-inch tires, five-passenger accommodation and pressed steel frame as leading features, is a new model for this year.

Model G, 40-45 horsepower, with a motor consisting of four, vertical, water-cooled cylinders cast in pairs; multiple disk clutch, three-speed and reverse sliding gear transmission, shaft drive, 108-inch wheelbase, weight 2,400 pounds, 34 by 4-inch tires, ten-feed Hill oiler, 18-gallon gasoline tank, accommodation for five passengers and pressed steel framework, is the third and largest model.

In all of these three models the Jackson Automobile Co., of Jackson, Mich., has combined many interesting details, characteristic of all three machines. Of the three, model C is practically a carried-over car as far as design goes, the motor being located beneath the body. The remaining two the approved designs in two and four-cylinder machines are noted. The following description of model D, the two-

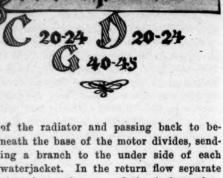




JACKSON MODEL D CONTROL

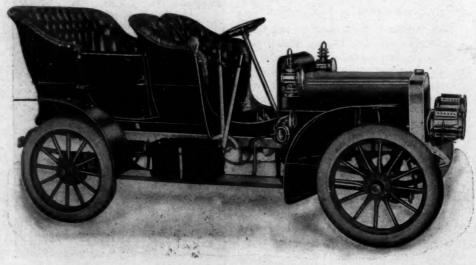
cylinder model with the motor located beneath the hood, applies solely to this car:

In this machine the use of a thermosyphon cooling system is an innovation. Its applicability is possible because of the opposed horizontal cylinders, the tops of the valve ports of which are little above the center line of the radiator, giving a large head of water in the radiator. The illustration shows the circulation pipes in this system. One pipe leaves the left base



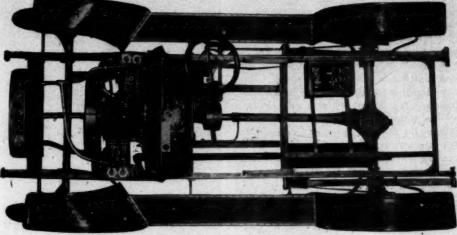
neath the base of the motor divides, sending a branch to the under side of each waterjacket. In the return flow separate pipes leave the tops of the jackets close to the valve cages. Passing the flywheel, one to the right and the other to the left, they unite and pass to the top of the radiator. In the models now coming through the factory this piping scheme is altered, so two separate pipes pass from the top of the radiator to the tops of the waterjackets and two others from the bottom of the radiator to the base of the waterjackets. All four of these pipes are used because of the thermo flow. All pipes to and from the radiator are of 14-inch diameter and the spaces in the jackets are %-inch wide. Speaking of the selection of the thermosyphon system the Jackson people say that with a gear-driven pump there is too fast a flow of water, sufficient time not being given the water in the radiator for cooling. They are the authority for the statement that of two motors mounted side by side on stands in the factoryone with a pump circulation and the other without the pump-the one without the pump actually gave the better results on a long run as well as on a short one. A still further feature of this thermo-syphon system is the doing without a fan to assist in the cooling and the absence of fan spokes in the flywheel. The radiator is of the honeycomb variety. Both cylinders are waterjacketed over more of the piston stroke than ordinarily.

Accessibility attracts in the motor. The cylinders, with 54-inch bore and 5-inch stroke, extend the entire width of the chassis frame, resting at the ends of the lower channel of the frame piece. The crankcase and planetary gearset case are bolted together and both are carried on a three-point suspension, two of the points being at the heads of the cylinders and the third beneath the gearcase. The crankcase, made of cast iron, aluminum not being used in any part of the car, is divided horizontally in the center and to both the top and bottom halves are bolted the inner ends of the cylinders. This design allows of taking off the top half of the case and then removing the crankshaft and the two pistons and connecting rods without taking off the cylinders.or dismantling the case for the gearset. In the top part of the crankcase the camshaft, with its short vertical pushrods, is carried. The shaft has its bearings in



JACKSON MODEL D, 20-24-HORSEPOWER CAR

plates in the ends of the upper part of the case and in removing it the forward plate must be detached. In the valve actuation excessively long rocker arms are used. The valves, all made interchangeable, are placed vertically in the tops of the ports and are opened by the action of these long rocker arms, in length equal to the distance from the center of the crankshaft to the center of the valve stem. Each arm is carried on a vertical support resting on the top of the cylinder. The inner ends of the levers rest on the tops of short, very short, pushrods, the upper ends of which project just beyond the top of the crankcase. The outer ends repose on the tops of the valve stems. All four rocker arms are interchangeable and are made of semi-steel, a metal which, it is claimed, is capable of being hammered into shapes without breaking should it be out of shape or otherwise injured. The support of each rocker is a hardened steel pin resting in the central support. A separate oiler suffices for each pair of rocker arms. The cast steel valves have the stems and heads separate pieces secured together by threading the head on and then riveting the top of the stem. Cams are keyed and pinned in position. To remove a valve it is necessary to take out the key holding the rocker arm on its axle, then unscrewing the cast iron valve cage, which threads into the top of the port. In the inner ends of the rocker arms are short adjustment screws which bear upon the valve stems. A lock nut secures permanently any adjustment. The interchangeability of the valves and actuating parts is commendable. Any of the valves will fit all four cages, as will any of the four rocker arms. Mixture is furnished by a Kingston carbureter carried low at the right in front of the cylinder head. A pipe leads to the base of the crankcase just in rear of the flywheel, where it divides, sending a branch to each cylinder. For starting purposes, two compression relief rods extend through the radiator, placing them conveniently for starting the motor. Control of the car-



PLAN VIEW OF JACKSON MODEL D CHASSIS

bureter is from the top of steering wheel. As to the operating parts within the cylinders little comment is needed. The crankshaft is a drop steel forging, revolving on bronze and babbitt bearings; pistons have three compression rings; connecting rods of I-section bronze are adjustable at the piston end and are hinged at the crankshaft end. The cap at this end can be loosened by removing an inspection plate on the side of the case and with the connecting rod cap swung back the

entire bearing of the connecting rod can

oiler, carried within the hollow metal dash

be taken out without dismantling other parts of the motor.

In lubricating the motor a six-feed Hill

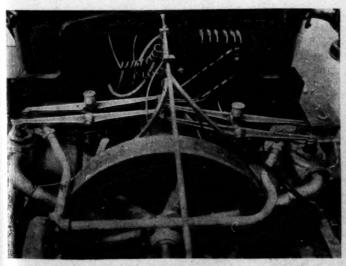
and driven by belt and pulley off the back end of the camshaft, is used. Two leads conduct lubricant to the cylinders. Two lead to the top of the crankcase and deposit the oil in a groove on the top of the connecting rods, from which it passes to the bearings of the rods; one connects with the flywheel bearings and the last leads to the driveshaft casing in the rear of the gearset. Ignition is by jump spark with current from storage and dry cells. A Splitdorf coil, carried on the dash, is of the two-vibrator type. The commutator, on the front end of the camshaft, consists

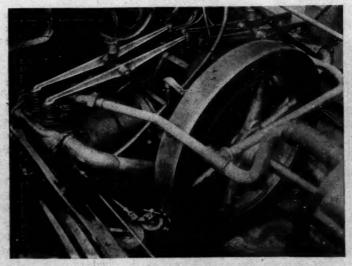
of a self-hardening steel pin secured to

the end of the camshaft and revolving within a case carrying the two binding posts for the cylinders. The spark plugs are carried horizontally in the front of the cylinder heads. Control of the spark takes place from the steering wheel.

In the three-point suspension of the motor and gearcase the motor is placed almost 6 inches to the rear of the front axle and is mounted so the crankshaft is not perfectly horizontal. It slopes considerably from the front so the end projecting through the center of the radiator is just high enough to permit of easy cranking. Placing the motor so far back allows of the use of a straight front axle; slanting the shaft towards the rear permits of a drive to the back axle with very slight angles at the universal joints, the line of direction being practically straight when under load. The backward position of the motor makes steering much easier than where the front of the motor is over the axle.

Two separate cases house the transmission parts needed in gaining the two speeds ahead and the single reverse. Beneath the toeboard of the car, and not shown in the plan view of the chassis, is the gearcase containing the pinions for the slow speed and the reverse. As previously stated, the casing containing these





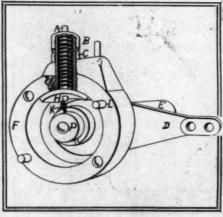
FRONT VIEW

JACKSON MODEL D MOTOR

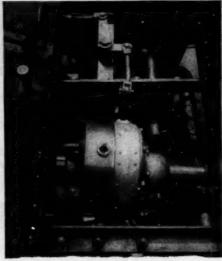
THREE-QUARTER VIEW

is bolted to the rear of the crankcase. Beneath the back footboard, and shown in the chassis view, as well as in a separate illustration, is a drum-like casing resembling very much a planetary case; but in this case it is a housing for the multiple disk clutch used on the high speed. Surrounding this easing is a single brake band intended for emergency uses and applied by the right pedal. On direct drive the pinions for the slow speed and reverse are idle and revolve with the casing. When running on either slow or reverse not a pinion in the gearset travels faster than the speed of the crankshaft, a feature conducive to long life of the gears and pinions. In getting the three speeds the slow ahead is by the left pedal, reverse by pulling the long side lever back and direct drive by forcing this lever ahead. The pedalette shown is for cutting out the muffler. The pinions in the gearcase proper and the disks for the high speed clutch constantly operate in oil. For replenishing the clutch supply a single oil hole, shown in the illustration, suffices. A similar oil hole serves for the gearcase. In connection with the final transmission of the power to the back axle Spicer dustproof universal joints are used, one being seen just to the rear of the clutch case. The propeller shaft is encased. The back axle, not of the floating type, has its driveshafts carried on Hyatt roller bearings and contains a Brown-Lipe spur gear differential. On the rear wheel are expanding brakes and bronze sectors operating within steel drums, which are lever applied and are intended for regular uses. Although not shown in the chassis illustration, the top half of the differential housing is removable for inspection.

In the running gear a simple pressed steel framework, made with parallel sides and ends and parts united by riveting reinforced by gusset plates serves. Crosspieces are not numerous, one only sufficing. It is midway of the axles and from this longitudinal members connect with the back crosspiece. Others extend forward. These latter carry the clutch casing and aid in supporting the steering gear, as well as the operating pedals. Half-elliptic springs serve in front and rear, the latter being



HOLTZ SINGLE-CYLINDER TIMES



JACKSON HIGH-SPEED CLUTCH CASING

offset off the frame members. On all four are two short top jumper leaves intended to give the same service as shock absorbers. The body favors the straight line design with easy back curves; the bonnet hinges to the dash lifting upwards when opened; the dash is of the hollow style; the steering column is rather straight, and the running boards and fenders are conventional.

IDEA IN DETACHABLE RIMS

Troubles experienced in removing pneumatic tires from the wheels in case of punctures and then replacing the tire again after a new inner tube has been inserted has given rise to the detachable rim. To all intents and purposes this rim is of the same cross section as the ordinary clincher rim, but it is removed from the wheel with the tire on it when a repair has to be made. The tire can be removed from this rim or attached to it in a few seconds, so the long, tiresome work of replacing an outer casing is done away with. George Shugers, of Auburn, Ind., has invented a peculiar form of rim which the Standard Welding Co., of Cleveland, O., is manufacturing and placing on the market. A cross section and assembled view of this rim is shown herewith. The rim A has a channel on the right side in which rests the ring E, which is one of the curved flanges for holding the side of the tire in place. The rim A has an opening B with a latch piece D. This opening is to permit the lug C on the section D to engage. The rounded corner of the opening B is to permit the lug to slip easily into place and at the same time to draw the rim E tightly into it, so when the latch D is closed the ends of the rim E are drawn into place and it is impossible for the rim to come off.

HAS SPRING CONTACT POSTS

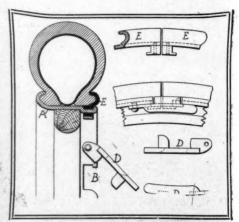
Made by the Automobile & Parts Co., Peoria, Ill., the Hotz timer, intended for one, two, three, four or six-cylinder motors, has spring contact posts. The illustration shows one of these posts in a single-cylinder motor, with a portion of the casing removed, exposing the coil spring and the plunger portion of the post. The plunger portion A is guided at its outer end by the cap nut B and at its inner end passes through a metal plate H embedded in the hard rubber insulating ring F, which forms the body of the timer and is carried on the steel back plate D. The half-time shaft of the motor E works within the plate D, a bronze bearing taking away the wear. In the timer illustrated a pin K in the forward end of the camshaft E makes contact with the end of the plunger A, but in the large timer for four-cylinder machines a cam is attached to the end of the shaft. It is pinned and held by a set screw. The cover is secured by the pins L and C is a nut, which aids in the cap nut B in holding the plate H in position. The maker puts stress on the fact that all parts of the timer are interchangeable; that any part can quickly be replaced; that the contact pin can be taken off without removing the timer; that the timer can be placed on any size of shaft from 1/4 to 3/4inch in diameter, and that the timer can be placed anywhere on a shaft, it being unnecessary for the shaft to end within the timer. This permits of its use on different motor shafts.

MOTOR CAR LITERATURE

The Vestal Shock Absorber Co., Pittsburg, Pa., has in circulation a pamphlet illustrating and describing its friction shock absorber for use on motor cars. The illustrations show the minutest construction of the device.

The regular 1906 catalogue of the Crawford Automobile Co., Hagerstown, Md., contains views of the four-cylinder car, its motor, transmission set, jackshaft bearing, clutch, top of chassis and rear hub and sprocket. The information is complete.

The Diamond Rubber Co., Akron, O., has an excellent book on its new Diamond wire mesh base, solid rubber tires, intended for commercial vehicles of the heavier type. The book cannot be classed as a catalogue partaking rather of the nature of an argument on the problems to be wrestled with in tires for heavy machines. The tires are fully described and priced.



SHUGERS DETACHABLE RIM



Carbureter Flap Valve—No. 820,583, dated May 15; to A. A. Longuemare, Paris, France—In the air passage at the base of the carbureter is a flap valve weighted at its lower end and pivoted at its upper end. When at rest this valve hangs vertically, obstructing the entire air passage leading to the spraying nozzle. With slight motor speeds the valve swings in the direction of the air current. The greater the motor speeds the greater the swing. The intention is to weight the flap valve according to the dimensions of the motor cylinders.

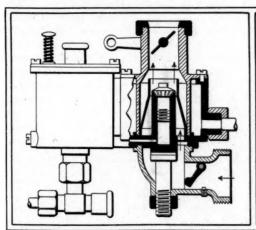
Concentric Tube Muffler—No. 820,566, dated May 15; to E. P. Gray, Detroit,

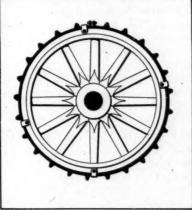
the major portion of this carbureter has communications at one end with the outer air and with the motor at the opposite end. Above this passage is a circular chamber in which is a diaphragm. Immediately below the horizontal air passage is the entrance of the gasoline. In the tip of the gasoline entrance is a vertical needle valve, the top of the stem of which is inserted in the diaphragm. With the cranking of the motor a suction is set up. This suction communicates with the small air space above the diaphragm, there being a small connecting passage for this purpose. The result is that the diaphragm is raised and with it the tip of the needle

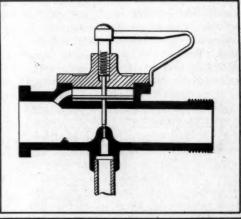
circling band of a single strip of metal. The band has integral portions that extend downwards on the sides of the tire to hold it in position. Teeth are riveted to the tread of the band to afford traction and a pair of perforated lugs clamps the tire and attach to the rim, thus holding the armor part in position.

Turbine-Propelled Automobile—No. 829,-444, dated May 15; to H. W. Southworth, Mittineague, Mass.—On the back axle of the machine is mounted a turbine enclosed within a proper casing. The car axle is in reality a plurality of axles. A source of heat is convenient to the axle. There is a number of connections between the axle and the running gear, each connection being so proportioned and related to the associated parts of the heat source as to increase or diminish the distance between the parts of the axle and the running gear.

Mechanical Lubricator—No. 820,419, dated May 15; to F. W. Hodges, Detroit, Mich.—The device is a many-feed sight







LONGUEMARE'S AIR VALVE

ADAMS' TIRE ARMOR

GARLLUS' CARBURETER

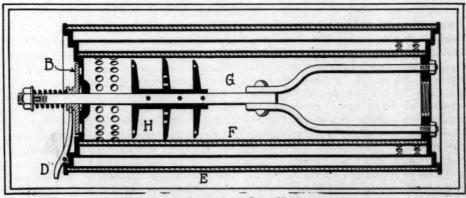
Mich.—The exhaust gases from the motor entering the end of this muffler, after passing through the two concentric parts of it, exit from the opposite end. Both of the cylindrical casings E and F, forming the muffler are composed of three parts. Two metallic cylinders separated by a layer of fibrous matter are introduced to reduce the resonant qualities of the metal. This fibrous matter extends beyond the ends of the metal parts so that when the ends of the muffler are tightened in place it forms a gasket between the ends and sides. A cutout assumes the form of an end plate B operated from the car footboard by a connection with the lever D. The plate B is held in place through the introduction of a central bolt G passing from end to end of the muffler. A coil spring ordinarily retains the plate B tight rendering the cutout inoperative. On the central bolt G is a series of baffle plates H. The ports, by which the gases passing from the central to the outer chambers are

Floatless Carbureter—No. 820,408, dated May 15; to B. Garllus, Madison, Wis.— The large horizontal air passage forming

seen, are at both ends.

valve is lifted out of the tip of the gasoline entrance, permitting the gasoline to flow, it being presumed that the gasoline tank is located higher than the carbureter. The greater the motor speed the higher will the diaphragm be raised, the wider open will be the gasoline entrance and the more gasoline will flow.

Tire Armor—No. 820,691, dated May 15; to G. Adams, St. Louis, Mo.—This tire tread armor for the prevention of tire wear and puncturing consists of an enlubricator for automobiles. Each feed has a separate plunger pump, which can be separately adjusted. At the bottom of the plunger barrel is a rotating shaft with a series of circumferential ports. As this shaft revolves one port registers with the inlet of the pump barrel allowing oil to pass from the pump reservoir to within the barrel of the pump. On the down stroke another port registers with the bottom of the barrel and directs the oil into the duct leading to the sight feed.



GRAY'S CONCENTRIC-TUBE MUFFLER

FROM THE FOUR WINDS



L. L. WHITMAN AND HIS TRANSCONTINENTAL FRANKLIN

Wayne First In—The first entries to be received for the New York Motor Club's second annual economy test are those of two Wayne cars.

New Jersey Parade—Close to 300 cars, many handsomely decorated, took part in the annual parade of the Hudson County Automobile Club, in New Jersey, last Saturday. The route of the parade was from Jersey City over the Hudson county boulevard to Bergen Point, where the members and their guests had luncheon.

Anxious for Good Roads—A large number of petitions from county commissioners throughout Ohio have been filed with State Highway Commissioner Sam Huston, asking for a portion of the appropriation the state legislature has voted for the improvement of roads throughout the state. The legislature has provided an appropriation of \$300,000 for this purpose, one-half of which will be applied during this year, the other half during next year.

Test of Odotachymetres—The concours of the odotachymetres for the Henri de Rothschild prize has just been held in the southeastern district of Paris and the committee is preparing the report on the devices submitted for approval. Twelve makes of these speed and distance recorders were presented for the laboratory tests. One was thrown out, leaving eleven to be tested under service conditions. Two British-made instruments, four French and five German and Dutch instruments will be reported on.

Plan European Trips—Several European touring parties, composed entirely of Philadelphians, have made arrangements through the Philadelphia branch of the Mercedes Import Co. to have their new purchases delivered to them at the several starting points of their continental outings. Rev. Charles Wood, a prominent local divine, will pilot a party of eight, in two Mercedes cars, through France, Italy and Switzerland. A well-known Quaker city banker will receive his car September 1 in Paris, and will then depart on a long jaunt through France, Italy and

northern Africa. Arrangements have also been made through the local branch for competent chauffeurs.

Woman Was Game—It is not often that a woman is found adventurous enough to take a balloon voyage all alone. This was accomplished, however, by Madame Emile Carton, wife of a well known Paris aerostat constructor, who jumped aboard the Floreal, a balloon of 300 cubic meters capacity, at Senlis, about 50 miles southeast of Paris. After passing over Paris, a journey of an hour and a half, she descended near Compiegne, some 60 miles north of the city, where a warm welcome awaited her.

Fights in Good Cause-The automobilists of Northampton county, Pa., are watching with interest the fight of County Solicitor Sowden to abolish tolls on the Allentown-Bethlehem pike. The Lehigh Valley Transit Co., which owns the pike, claimed that the road is worth \$60,000, but Mr. Sowden produced accounts which showed that its original builders paid less than \$22,000 for materials and labor. Besides, the solicitor proved that before being transformed into a pike the road was a state highway, and that it therefore belongs to the people without paying a cent for it. Of course, the traction people are going to fight, but legal lights say the solicitor has them "on the hip."

Balloon Race Saturday-As a result of the recent successful balloon flight of Alfred N. Chandler from Philadelphia to South Amboy, the former city probably will be able to boast of an aero club before many days. A call for a meeting having that object in view was issued last week and several proposals for membership are already in the hands of Mr. Chandler and Henry S. Gratz, of the Union league. Next Saturday, weather permitting, will witness the first balloon race ever held in this country, Chandler's Initial and the Orient, owned by members of the New York Aero Club, being entered. The ballcons are of the same size-35,000 cubic feet gas capacity-and will be in

charge of Levee and Stevens, professional aeronauts of considerable prominence.

Talks Another Beach Meet—The Atlantic City Automobile Club is engaged on the preliminaries of its next beach meet, which will be held shortly after July 4.

Has Motor Cycle Fleet—Wilmington, Del., is progressing. It now has a squad of motor cycle cops to keep the rip-roaring automobilist within bounds.

Old Landmark Gone—The Fern Croft inn, near Danvers, Mass., has been burned to the ground. This celebrated hostelry has been noted for years as the favorite resort of New England motorists and its choice chicken dinners will be recalled with gustatory delight by many visitors from the west.

Fixture at Wilkes-Barre—So successful was the recent Giant Despair mountain climb at Wilkes-Barre that the automobile club of that place has about decided to make it an annual fixture, the date, however, to be some time in June, when the weather is more settled. Daily efforts to beat the Daimler's 2 minutes 11½ seconds have been made all week, but have not been successful, although the Rambler and the Stevens-Duryea both bettered their respective times in the contest

Germantown Election—At the annual meeting of the Automobile Club of Germantown, last Monday night, Thomas B. Prosser was elected president; Charles H. Thompson, vice-president; Mark B. Reeves, secretary; Robert P. Hooper, treasurer. The new members of the board of governors are William E. Helme, John B. McIlhenny and Clarence B. Collier. There was but one ticket in the field. After the business of the meeting had been disposed of there were the usual smoker and banquet, which brought out a big crowd.

Empire State Registration—The New York state registrations for May up to the 15th of the month show a proportionate increase largely in excess of that for the month of April, which was phenomenal. During this period 902 cars were registered, an average of about seventy cars per week day. There were 852 registrations of American and 50 of imported cars. The leaders in the registration were: Cadillac, 76; Maxwell, 48; Franklin, 46; Pope, 45; Oldsmobile, 44; Locomobile, 41; Thomas, 38; Packard, 37; Pierce, 36; Rambler, 43; Winton, 32; Au-

tocar, 30; Ford, 29; White, 27; Reo, 21; E. V. C., 17; Stevens-Duryea, 16; Rainier, 14, and Northern, 14. The foreign leaders were: Mercedes, 14; Panhard, 7.

Church Kicks—The automobile entered into the proceedings of the recent convention of the diocese of Long Island at Garden City last week, with the result that a letter has been written the American Automobile Association asking that it prohibit speed trials of racing cars entered for the Vanderbilt cup on the Sundays preceding the race.

Balk on Big Toll—Montgomery county, Pa., automobilists are indignant over the excessive toll charges insisted upon by the Sonderton & Dublin Turnpike Co. and have brought an action against the company in the county court at Norristown to test its right to charge them a higher rate than those charged drivers of horse-drawn vehicles.

Whitman Restless—L. L. Whitman is down for another big automobile stunt, so it is said. This time he is to take a Franklin and visit every state in the union before returning to Syracuse, N. Y. This will be an automobile tour of some 12,000 miles. Whitman, who has twice crossed the American continent with an automobile, was one of the refugees from the San Francisco fire. In the transcontinental Franklin, which is still in good

running order, he escaped from Prisco with Mrs. Whitman, and drove the car south to Los Angeles in 4 days.

Has Associate Membership—The Long Island Automobile Club has voted to establish an associate membership, to which motor car owners living in Long Island outside of Brooklyn shall be eligible. There will be no initiation fee. The annual dues will be \$10.

Badgers Want Free Alcohol—Mayor Becker, of Milwaukee, is at the head of the action taken by the Milwaukee Automobile Club favoring the free alcohol bill now pending in congress. At a recent meeting held in the mayor's office it was resolved to work for the measure and each member of the club will use his personal influence on Senators La Follette and Spooner.

Has a Quake Record—William H. Mc-Donald landed in Chicago this week from San Francisco, where during the troublous times of the earthquake and the fire he drove the Columbia car used by Acting Chief Dougherty, of the fire department. For 40 hours McDonald never climbed down off the seat of his car. Seven Columbias were in the government service and three in the fire service. McDonald and his wife stood in the bread line for provisions and after getting a bank book endorsed stood 3 days in line to withdraw

\$100 a day from the mint to get back east. McDonald will make Chicago his home in future.

Enthusiastic Suburbanites—The Austin Automobile Club, located in one of Chicago's west side suburbs, has decided to have its annual tour of the city on June 9, when it is expected eighty cars will parade over the boulevards.

Club in Malden—The Malden Automobile Club, of Malden, Mass., has been organized and the following officers elected: President, A. E. Bliss; vice-president, E. B. Baudry; secretary, H. K. Frost; treasurer, C. T. Small; board of directors, Dr. F. W. Plummer, R. C. Guptill, Dr. T. J. Springall, F. N. Joslin and Herbert Damon. The club started with twenty-two members.

Wise Chauffeurs—The recently-organized Chauffeurs' and Repairers' Association of Indiana advocates a state examination for licenses and an effort will be made to bring this about. Membership in the association is limited to Indiana repairmen and chauffeurs and no one under 18 years of age can get in. Officers elected are as follows: President, William Davidson; vice-president, William Rugenstein; secretary, Fred Wiltshire; assistant secretary, Fred Seegar; treasurer, George Swihart; directors, Harry Bell, Minor Farley, Gus Krause and Jesse Sutherland.

THE READERS' CLEARING HOUSE

USING GENERATORS

Milwaukee, Wis .- Editor Motor Age-I have a double-cylinder engine which has been used in a boat and formerly was fitted with make-and-break ignition. wish to use the engine in an automobile I am building and have put jump spark on the engine. The magneto I formerly used with good results will not run the engine now with the jump spark outfit and I am at a loss to understand why. I borrowed a dynamo of well-known make and tried that, but, while I got the engine to run for a while, it soon began to miss and after a while stopped altogether. While running, a large spark formed at the vibrator points on the coil. I desire to use some kind of a generator, but am at a loss to know what to do. Will you kindly explain what will be best for my engine?-Badger.

The magneto you had in the first place would still do good service on the engine if you had retained your old system of ignition, but it is not made to use with jump spark coils. Its output is most likely one of comparatively high voltage and low amperage, in other words about 15 volts and 1 ampere, whereas it should be at least 7 volts and 6 to 7 amperes. Even if it had the output last mentioned it would not work with a coil of standard make, inasmuch as coils for any kind of generators must be wound especially for

the machines with which they are to be used. You will get better results from a direct current dynamo in connection with the jump spark system providing you get a coil with the dynamo, and will then have practically no arc at the vibrator points and quite as much secondary current as is generated by batteries of equal voltage as the dynamo, but unless you get the combination the results would not be satisfactory. The output in voltage and amperes might be the same in both the batteries and the dynamo, but as there are electrical conditions existing in the dynamo that do not exist in the batteries, the coil must be made with those conditions in mind, otherwise a large arc at the vibrator points and a weak secondary spark will be the result, either one of which is sufficient to cause anything but satisfactory results. Dynamo makers have come to realize the importance of having coils made to suit the conditions existing in their own machines and many of them can supply such material, but it is a fact that no dynamo or magneto can be made to fit any or all coils as supplied in the open market. You might be able to get much longer service out of the dynamo you tried providing you replace the points on your vibrators with pure iridium. While this will be somewhat expensive, iridium will last a long time. This will only be a makeshift plan, however, as a trial will show.

OVERHEATING MOTOR

Portage, Wis .- Editor Motor Age Something has gone wrong with the cooling system on my car-a single-cylinder Cadillac. No difficulty was experienced all last year, even in the hottest weather, and the car has been untouched. Lately I took out the pump, and found that it is perfectly tight and, furthermore, handles a good volume of water. But the motor does not cool and the radiator does not become heated as it did last season. Last winter I used calcium carbide in liberal quantity to prevent freezing in this climate, and I have wondered if this has caused the trouble. Can you enlighten me through the columns of the Readers' Clearing House !- E. B. Evard.

If the inquirer is absolutely sure that the water circulates-if the water heats, notwithstanding the fact that the radiator does not-he may be sure the water circulating system needs cleaning. Possibly the water jacket on the motor and the radiator have become incrusted. Mix a solution of 1 pound of caustic soda to 1 gallon of water and fill the radiator and tank. This should remain for 4 or 5 hours and be thoroughly circulated. Drain off and flush the radiator with clean water, using considerable pressure, if possible. If one treatment does not bring results try again. In flushing, the pump should be disconnected from the water circuit.



CALLS TAG BILL INVALID

Judge Sullivan, in the Boston municipal criminal court, has declared invalid the regulations regarding the displaying of registration numbers and lights by automobiles, which have been in force in Massachusetts since August 20, 1903, when they were promulgated by the highway commission of that state.

The law was found defective on a technicality. The case in point was that of Walter Clapp, Jr., who was brought into court because he had a number missing from the front of his machine. Hurtubis, Keen & Thibodeau, counsel for Mr. Clapp, required that the government prove that the highway commissioners had passed a regulation requiring that number plates shall be carried at both ends of an automobile.

The only evidence which the secretary of the Massachusetts highway commissioners could introduce from the records of the commission was that on August 20, 1903, it was voted that a "form of certificate" be approved, and the government tried to show that this vote included the rules and regulations printed thereon, but the court sustained the contention of the defendant's attorneys, that to approve a form of certificate is not passing rules and regulations, and incidentally it developed at the trial that, as matters now stand, the Massachusetts highway commissioners regulations, as printed upon the various certificates of registration, are null and void. The defendant was discharged.

In Massachusetts an act providing for the registering of automobiles was passed by the assembly, April 12, 1904. After stating that all cars must be registered, and explaining the form in which the application shall be made, it authorizes the secretary of state to issue a certificate of registration.

THEY HATE TO DO IT

Since the decision of the Pennsylvania state supreme court making it obligatory for Philadelphia automobilists to secure a municipal license and tag in addition to those issued by the state, the offices of the bureau of boiler inspection, in the city hall, have been overrun daily with hundreds of automobilists who sullenly hand over their money and secure their blue-and-yellow tag. The objection to the recent decision is not so much on account of the additional cost but because of the necessity of changing tags every time a car crosses the city line. Outside of Philadelphia county it is illegal to display any

but a state tag, while inside its limits both tags may be carried. Of course, it's a big nuisance, and officials of the Automobile Club of Philadelphia have decided to make an effort to induce councils to remedy the matter somehow. Several of the clubmen have taken councilmen out in their cars during the week, purposely selecting routes which necessitated the unshipping and replacement of the city tag as the car crossed and recrossed the city line. The demonstration is said to have been quite convincing, and if a way can be found out of the difficulty some of the sapient city fathers will put it up to their confreres. Several ingenious local automobilists have temporarily abated the nuisance on their own account by so hanging the local tag that it may be pulled up in a position parallel with the road surface, and out of sight, by pulling a cord attached to the lower edge of the tag on the back of the car.

SEE WAY TO STOP 'EM

It is extremely annoying to a conscientious and law-abiding automobilist to be arrested and haled before a magistrate for exceeding the speed limit, especially when he is well known in the neighborhood and has a reputation as a careful driver. But the constables of Montgomery county, Pa., especially in that portion of it adjacent to the Philadelphia line, play no favorites. "Business is business," say they; "and all is grist that comes to the mill." Besides, they need the money, the \$3.10 costs being divided between the magistrate and the officer making the arrest. The police, who work in pairs, are becoming expert handlers of the stopwatch, and when an automobilist comes along toward the quarter- or half-mile trap-usually on a smooth down gradethey snap him off, and to his dismay he next day receives a court order to appear before the magistrate to answer the charge of overspeeding. So fine have the Vidocqs drawn the line that in one recent instance the testimony of one of them showed that the "victim" had covered a quarter-mile trap in 46 seconds. Had he done it in 45 seconds he would have been just within the legal limit of 20 miles an hour! This is drawing it a little too fine, and the victims are beginning to kick in the traces. Last Thursday night a number of prominent automobilists living near Chestnut Hill, including Isaac Starr, Jr., expresident of the Automobile Club of Philadelphia; William A. Dick, the present president; Jay Cooke III, and a score of others, held an indignation meeting at the Philadelphia Cricket Club and threshed the matter over thoroughly. They feel they are the victims of a few Philadelphia automobilists who persistently violate the speed laws, and who usually move so fast it is difficult to apprehend them. After a long discussion it was decided that one way to lighten their burdens would be to increase those of the real culprits, and with that idea in view the following resolution was unanimously adopted: "Resolved, that we hereby pledge ourselves to report to the secretaries of our several clubs or associations the license number of any automobilist whom we see breaking the speed limit or disregarding the rights of other users of the highway."

COULD NOT PROVE NEGLIGENCE

Because it was not shown to his satisfaction that the automobile collision was caused by some negligence, Judge D. H. Tilden, of Toledo, O., directed a verdict for the defendant in the case of Charles A. Turner against the Pope Motor Co. and the Baker Motor Vehicle Co. The suit grew out of an accident at the Cleveland driving park, September 5, 1903. Waverley and Baker were racing when the automobiles came together and Turner, standing outside the track fence, was injured. It was claimed that the high rate of speed and the fact of the automobiles running too close together were to blame. The other side held, and was sustained, that so far as the proof went the accident could have been due to causes over which there was no ordinary control. Turner sued for \$15,000, October 27, 1905.

WOULD CHANGE FEES

An ordinance has been introduced in councils in Allegheny, Pa., providing for a change of license fee. It is proposed that a fee of \$5 shall be charged for one-seated vehicles and \$8 for larger ones. The present ordinance provides for the issuing of a single vehicle license to one-seated automobiles and that the fee for larger cars shall be the same as for a two-horse vehicle. The increase is likely to make a long, loud howl from the motorists in Allegheny and Pittsburg.

BUCKEYE BRINGS SUIT

Before the supreme court of Ohio has been brought a suit by Attorney Wade Cushing, of Cincinnati, to test the constitutionality of the act passed by the Ohio legislature on April 2, 1906, regulating the speed of automobiles and other vehicles throughout the state. Attorney-General Wade Ellis recently gave his opinion to the secretary of state that the law, as it now stands, is unconstitutional, for three reasons, as follows: It is not uniform in its operation; it deprives municipalities of the power to regulate the use of their streets as to certain classes of vehicles, automobiles and traction cars: the provisions of the law are uncertain and indefinite. Upon this information the secretary of state has refused to carry out the provisions of the law. That official, however, has been empowered to issue licenses for speed limits of 10, 15 and 20 miles an hour, according to surroundings, but the law that empowers him to issue these licenses does not go into effect until June 1.

The question as to speed of traction cars also comes in under this head. At present no city has the power to regulate speed except that which is granted by the state, for when the state undertakes the regulation itself it is superior to any city in the matter. Traction and interurban officials are interested, as the state law covers the operation of their cars, and at one time a citizen of Cincinnati, who was arrested for violating the speed limit, claimed it was violated every day by the traction company.

RENEW GRAND RAPIDS FIGHT

The automobile fight in Grand Rapids, Mich., this year threatens to make that of last season look like small potatoes. Owners are required by law to have tail lights and the police are gathering in those who have thought the law considered four lights enough. The fines run about the same as for running over the speed limit, however. At a recent meeting of the board of police and fire commissioners W. S. Austin, of the Austin Automobile Co., appeared and asked that the board be less strenuous in enforcing the law as in case he could not run over the limit slightly he would be unable to demonstrate cars properly and therefore would lose many sales. The board, however, paid little attention to him and would give him no satisfaction. The worst part of it was that,

although Austin had paid a fine for speeding on the day he went before the board, it was only 2 days more before the officers caught him napping and he was arrested again on a similar offense. The automobile owners of the city are now arising in their wrath and charges are being hurled at the head of the officers with the stop watch.

COWARDLY TACTICS

In the trial of a damage suit in the Wayne circuit court at Detroit, a chauffeur in the employ of one of the large garages testified that the practice had become quite general in the city, when a machine was brought in for cleaning, to thoroughly cleanse every particle of the car's surface with the exception of the license number. This is always, of course, on the orders of the owners of the cars, who do so in order to make possible detection by the police difficult in cases where a flying identification is the only one available. Some of the numbers, the witness said, get so encrusted with mud that .they are utterly illegible, even at short range.

FOOLS THE POLICE

London automobilists are chuckling hugely over the defeat of the police in an attempt to browbeat friends of motorists from attempting to warn them of the existence of police traps. The man selected for martyrdom in this way is named Little, living outside a London suburb. He observed a trap working close to his residence, and, out of sheer good nature, proceeded to warn motorists. The police objection to this took the form of prosecution for "obstructing the police in

the conduct of their duty." After grave and patient hearing and learned argument the board of magistrates, however, confessed that it was unable to see that a citizen who prevents another from breaking the law can in any way be regarded as obstructing the police, whose duty only comes in operation when that law is

OWNER ALSO LIABLE

Whoever participates in the overspeeding of an automobile is liable criminally, according to a decision of a majority of the Massachusetts supreme court handed down in the test case of the Commonwealth vs. Roland H. Sherman, son of Judge Sherman, of the supreme court. If the owner or anyone having control of a machine knows or allows the machine to be run illegally he is equally liable with the chauffeur. Mr. Sherman was found guilty in the town of Leicester of driving his machine more than 12 miles an hour. He appealed on the ground that his chauffeur was in charge at the time.

ALBANY RESTRICTIONS

Charles M. Bissell, commissioner of public works of Albany, N. Y., declares automobilists are exceeding the lawful speed limit in the parks and along the boulevards which form a part of the park system of Albany, and that the practice must stop. He has requested Corporation Counsel Andrews to draw up an ordinance regulating the speed of automobiles within the city limits and especially on the viaducts and bridges owned by the city. He suggests that the speed on the bridges be limited to 6 miles an hour and elsewhere within the city to 8 miles an hour.

MAINE ISSUES RULES OF THE ROADS

From the office of the secretary of state of Maine has been issued a little pamphlet entitled "The Laws of the Road," which is being sent to automobile owners. In part the rules are as follows:

Section 1-As used in this chapter, the word "way" includes all kinds of public ways. And the word "team" all kinds of conveyances on such ways for persons and for property. Section 2—When persons traveling with a

team are approaching to meeet on a way, they shall seasonably turn to the right of the middle of the traveled part of it, so far that they can pass each other without interference. When it is unsafe or difficult on account of weight of load to do so, a person about to be met or overtaken, if requested, shall stop a reasonable time, at a convenient place, to enable the other to pass.

Section 3—When a person with a team is stationary, or traveling slowly on a way at a place unsafe or inconvenient for passing with a team, he shall, if requested, drive to the right or left, or stop a reasonable time at a convenient place to allow the other to pass.

Section 4—No person shall leave his team

stationary on a way so as to obstruct the free passage of other teams, or allow his team to

be on a way without a driver. Section 6—Any person injured by violation of either of the previous sections may recover damages in an action on the case, commenced within 1 year. Such violator forfeits not less than \$1 nor more than \$20, to be recovered on complaint made within 60 days.

Section 7—No automobile or motor vehicle shall be driven or operated upon any highway,

townway, public street, avenue, driveway, park or parkway at a greater rate of speed than 15 miles an hour, or upon any highway, townway, public street, avenue, driveway, park or parkway within the compact or built up portions of any city, town or village, the limits of which shall be fixed my the municipal officers thereof, at a greater rate of speed than 8 miles an hour, except where such city or town may by ordinance or by-law permit a greater rate of speed.

Section 8—No person driving or in charge of

an automobile or motor vehicle on any highway, townway, public street or avenue, driveway, townway, public street or avenue, drive-way, park or parkway, shall drive the same at any speed greater than is reasonable and proper, having regard to the traffic and use of the way by others, or so as to endanger the life or limb of any person; and racing any such vehicle on any such ways or parks is hereby forbidden.

Section 9-Every person driving or operating an automobile or motor vehicle shall at request and signal by putting up the hand, or by other visible signal, from a person riding or driving a horse or horses or other domestic animals, cause such vehicle to come to a stop as soon as possible and to remain stationary so long as may be necessary to allow such animal or animals to pass.

Section 10-Every such automobile or motor vehicle shall have attached thereto a suitable bell or other appliance for giving notice of its approach, which, when rung or otherwise operated, may be heard at a distance of 300 feet; and shall also carry a lighted lamp between one hour after sunset and one hour before

Section 11-Municipal officers of any city or

town may designate places on any streets or ways therein where, in their judgment, by reason of cliffs, embankments or other exceptional son of cliffs, embankments or other exceptional natural conditions, the meeting of automobiles or motor vehicles and horses would be attended with unusual danger. Such designation shall be made by causing the words "Automobiles—Go Slow" to be conspicuously displayed on signature of the best statement of the sta boards at the right hand side of each approach to the place to be designated and not more than 150 feet distant therefrom; and an automobile or motor vehicle, before meeting any horse between such limits, shall be brought to a standstill, and shall not proceed, unless by request of the rider or driver of the horse, until such horse shall have passed; and no such wehicle shall pass any place so designated at a greater speed than 4 miles an hour. Section 12—Whoever violates any provision of the five preceding sections shall be punished

by fine not exceeding \$50 or by imprisonment

not exceeding 10 days. Section 21—Automobiles or motor vehicles owned by non-residents of this state and driven by a person licensed in this or in some other by a person received in this of in some other state may be operated on the roads and high-ways of this state unless prohibited by special law or town ordinance duly authorized by the legislature, subject, however, to the provisions of sections 7, 8, 9, 10, 11 and 12, and pro-vided that such persons shall show in front and at the back of his motor cycle the regis-tration number granted him in such other state, and the name of the other state in Arabic letters at least 1 inch high. The provisions of this and the preceding sections shall not prevent the operating of automobiles by unlicensed persons if riding with or accompanied by a licensed operator.



PACKARD COMPANY'S ADDITION TO DETROIT PLANT

Jaynes Out—W. C. Jaynes has disposed of his interest in the Jaynes Auto Co., of Buffalo.

Beliance, Too—The Colonial Auto Co., of Fifteenth and Oxford streets, Philadelphia, which recently opened up with the Dolson car, has added the Reliance.

Ford Explains—Deliveries of a few model N Ford four-cylinder runabouts are promised for June; they will come along at a fair rate in July, and after that they will come rapidly. James Couzens, while in Chicago this week, explained that the delay in construction is caused by the failure to get the necessary parts.

M. & W. O. K. Again—The San Francisco branch of Morgan & Wright has been reëstablished and is now at 411-413 Golden Gate avenue. The branch has been practically restocked and is now in position to take care of the coast trade. Morgan & Wright also have made arrangements with the Auto Tire Co., of Kansas City, to handle their tires and accessories.

Quaker Rumor—There was a rumor going the rounds of Philadelphia's gasoline row last week to the effect that a syndicate had secured an option on a plot of ground, 200 by 200 feet in dimensions, in the neighborhood of Broad and Arch streets; upon which will be erected a three-story fireproof structure on the general lines of Boston's Motor Mart. There is need for such an establishment, suitable places along and in the vicinity of the row being scarcer than the proverbial molars of the maternal barn-yard fowl.

Hoosier Prosperity—Census bureau figures show there were in Indiana in 1904 eight automobile factories, with a total capital of \$1,140,509, divided as follows: Land, \$67,500; buildings, \$167,871; machinery, tools, etc., \$309,125; cash and sundries, \$596,013. In that year there were 789 wage-earners who earned \$482,198. Miscellaneous expenses amounted to \$230,226, while the cost of the materials used was \$811,823. The value of the product in 1904 was \$1,595,302. During that year there were also three establishments engaged in the manufacture of automobile

bodies and parts. The capital invested was \$53,495, and the value of the product that year was \$43,300.

To Talk Packard—C. J. Trumbull, recently connected with the Packard Motor Car Co., of Detroit, has joined the selling force of the Keystone Motor Car Co., which handles the Packard in Philadelphia.

Frisco Charges—For the automobiles used by the committee of 40 during the recent San Francisco disaster a bill for \$157,599 has been filed. Fewer than 1,000 machines were employed, which has caused a holler over the 129 claims filed.

Another New One—H. Paulman & Co., Chicago representatives of the Pierce Great Arrow, have the building fever and an old residence at 1432 Michigan avenue is being torn down to make room for the new store Paulman & Co. will put up. They expect to be in possession by August 1.

Bill Busy—L. H. Bill, manager of the Rambler branch in San Francisco, has established a garage at 31 Sanchez street. He sold three of the five somewhat damaged cars he had rescued in as many days and has now placed his order for fifty surreys, type 1; ten of type 3, twenty model 14's and six model 15's, the total aggregating \$123,500.

Early Birds—Claim is made by J. W. Leavitt & Co. that they were the first to break ground for a new automobile site in 'Frisco since the fire. The flames devoured all the catalogues and price lists Leavitt & Co. had and now they request all manufacturers and jobbers whom they represent to forward them new literature to 370 Twelfth street, Oakland, Cal.

Snutzel's New Line—The Snutzel Auto Supply Co., of 1534 Broadway, New York, has concluded a sweeping contract with Mestre & Blatge, who are the largest manufacturers and exporters of automobile accessories and supplies in France. The contract makes the Snutzel company its sole agent and representative for the United States, its colonies and possessions, and the company will in future handle, exclusively at wholesale, the siren and other horas,

lamps, timers, voltmeters, ammeters, batteries and other supplies made by Mestre & Blatge.

Open Irving Garage—Dietz & Lester, successors to the Dietz-Plummer Motor Car Co., of Philadelphia, have opened the Irving garage at 1313 Irving street, above Spruce.

Must Keep Road Clear—Chicago south park commissioners object to dealers along the row leaving cars ranged along the curb and last week they issued an order limiting the time any car can be left standing to 15 minutes.

Delay Explained—The delay in the matter of the Automobile Club of America's accounting with the exhibitors at the club's show in the Sixty-ninth Regiment armory, as affecting possible rebates, is said to be due to a contention now on with the contractors, who have made claims for damages to the walls and other parts of the building.

Certainly Wideawake—William Middleton, of the Middleton Motor Car Co., of San Francisco and Los Angeles, whose 'Frisco garage in Van Ness avenue was razed and fired by the disaster of April 18, passed through Chicago on his way east. Mr. Middleton goes to Ardmore, Pa., and to Hartford, to arrange for extra allotments of Autocars and Columbias.

Packard's New Addition—The Packard company's new building at Detroit, which is to be 728 feet long by 63 feet wide, and two stories high, will be done July 1, a most opportune time, as the middle of June will see the completion of the output and shipment of the Packard 24, so that the moving of some departments will not seriously interfere with the work in the shops. The new building will add 91,700 feet of floor space, making a total of ap-



INTERIOR VIEW OF GARAGE

proximately 310,000 square feet. Part of this additional room was made necessary by the demand for commercial vehicles.

To Show Wayne Racer—A 50-horsepower Wayne car, one of two to be entered for the eliminating trials, is to be exhibited at the New York open air show at Empire City track this week.

Franklin Shipments—Up to the first of May the H. H. Franklin Mfg. Co., of Syracuse, N. Y., had delivered about 1,000 of its 1906 Franklin cars, and is now shipping at the rate of ten per day.

Neubauer Moves—Notice of the removal of the palais de l'automobile, which handles the Delaunay-Belleville, Panhard and Renault, is given by A. C. Neubauer. The new show rooms are at 571 Fifth avenue, New York city.

Gets Old Reo Place—The Atlantic Motor Car Co., at the head of which is R. P. Newton, has secured the New York agency for the Autocar and leased the building at 138 West Thirty-eighth street now occupied by the Reo Motor Car Co., which will move on June 1 to the big garage of the American Automobile Storage Co., at 42 West Sixtieth street.

Garage for Electrics-Buffalo motorists consider the garage of the Babcock Electric Carriage Co., at 240 Utica street, a novelty. This garage is used exclusively for electric vehicles and is said to be the largest one in existence devoted to electric Two hundred cars can be cars only. stored on the first floor without crowding. At the present time there are over 125 cars in commission. The charge for storage is \$25 per month, which includes all the current necessary; washing and all minor adjustments. For an additional charge of \$5 cars are delivered and called for at residences at any hour of the night or day.



OCK ELECTRIC CARRIAGE Co., BUFFALO



VIEW OF PACKARD ADDITION FROM TOP OF OLD BUILDING

They generate their own current from gas engines which are run by natural gas, and which has proved entirely satisfactory.

Ready for Business—The 'Frisco agents for the Columbia have opened up in the unburned section of Van Ness avenue, in Oakland, and in Los Angeles and have sold eleven Columbias and twenty-four Autocars since the disaster.

Held Back by Uncle Sam—The Greer Motor Co., of Chicago, is at present occupying temporary quarters until it can get the old church at Fourteenth street and Michigan avenue now used to exhibit the Golgotha painting. The government is trying to sell the picture and until it is disposed of the Greer people will be kept on the anxious seat.

Alcohol Tests by Ford—Henry Ford has been conducting experiments to determine the best type of carbureter or mixing valve for vaporizing alcohol for internal combustion motors. The exact results he will not disclose, but he does state that in the case of the six-cylinder type of motor, the average gasoline test of which is 52 horse-power as high as 60 horsepower was obtained in several tests with alcohol as fuel. A dynamo was used, the armature being directly connected with the shaft so accurate readings could be obtained, no matter what speed the motor was traveling during the test.

Rattan Runabout Body-The Corbin people are out with a new runabout body made entirely of rattan with individual seats. Behind the seats a sloping platform, also of rattan, extends to the end of the frame, where there is room enough for a tonneau. Spare tires or covers may be carried on the platform, and the rear half of the platform is made into a clothes locker, which is made waterproof by a sheet rubber lining. The rattan has been left in its original color, though it could be painted any hue desired. It is designed as an extra body for summer touring, and though very strong and substantial has the great advantage of weighing less than half as much as a regular runabout body. It has a rakish appearance and makes the car look like a road racing machine.

Line Wanted—H. E. Elrod, general manager of the Bartlet Steel Co., of Joplin, Mo., writes Motor Age that his company desires to represent some manufacturer of a good, moderate-priced machine.

To Bring Back Body Makers—M. J. Rothschild, American representative of Rothschild & Co., of Paris, sailed for France last Thursday to arrange to bring over 100 workmen for the firm's bodybuilding factory recently established in New York.

Home for Royal Tourist—The Royal Tourist will soon have for its New York headquarters one of the most commodious and most completely and handsomely equipped garages in town, C. A. Duerr & Co., its metropolitan agents, having leased the double building at 2182 Broadway, near Seventy-seventh street, now occupied by Samuel F. Randolph Jr.'s Metropolitan Auto Co., until recently agent for the Autocar.

High Gear Test-General Cutting, New York agent of the Olds, hit upon and put through a novel method of making good his claim that the four-cylinder Oldsmobile could climb on the high gear the average hills to be found in a half-day's run from New York. This he demonstrated on Saturday afternoon by a run of 75 miles from Gotham to Poughkeepsie. With Ernest Keller, who is to drive the Olds Motor Works Vanderbilt cup candidate, and Joe Tracy, of international racing fame, dividing the work at the wheel. and two members of the New York Motor Club acting as official observers, and with the high gear lever sealed, the run over the constantly occurring and often difficult hills en route was made without the car once being stalled and without a hitch of the machinery, in 5 hours 10 minutes, net running time. The car used was the model S, which is equipped with a 26-28-horsepower motor of the fourcylinder, water-cooled type and sliding gear transmission with selective control.

BRIEF BUSINESS ANNOUNCEMENTS

Somerville, Mass.—Hill & Holt are planning a new garage.

St. Charles, Ill.—H. J. Hahn has opened a garage and repair shop here.

Boston—F. L. Bradley, of 624 Columbus avenue, has taken the agency for the Dorchester runabout.

Atlanta, Ga.—A branch of the Pennsylvania Clincher Tire Co. has been opened at 102 North Pryor street.

Chester, Pa.—Phil Williams has been appointed manager for the Chester Automobile Co., the agent for the Pierce-Arrow.

Brooklyn—The Grant square garage, 1378-1382 Bedford avenue, has secured the agency for the Moon for Greater New York.

Boston—W. A. Page, of the Motor Mart, has taken the agency for the Simplicity, formerly known as the Windsor, for New England.

Augusta, Me.—The Railway Auto Car Co. has been incorporated with a capital stock of \$50,000 to manufacture railway appliances.

New York—C. A. Winch has been elected treasurer of the McGiehan Mfg. Co., which is now installed in its new head-quarters at 1557 Broadway.

Elizabeth, N. J.—E. M. Warren, formerly of the Diehl Motor Works, has gone to Somerset county, where he will be manager of a large motor works.

Boston—E. S. Breed has given up the agency for the Elmore, and has taken the agency for the Buffum, a four-cylinder, water-cooled light touring car.

Boston—The Boston Mechanical Co., of the Motor Mart, of which H. E. Whiting is the manager, has taken the New England agency for the Moon.

Philadelphia—F. S. Lester, of Detroit, formerly connected with the Cadillac company, is now associated with John N. Dietz, Jr., formerly of the Dietz-Plumer Motor Co.

Dover, Del.—The Atlas Automobile Co., of Pittsburg, Pa., has secured a Delaware charter. The company has a capital stock of \$200,000, and will manufacture and deal in automobiles and vehicles of all kinds.

Utica, N. Y.—E. W. Swancott, for the past 12 years connected with the Utica Gas & Electric Co., is now with the Utica Motor Co., of 333-337 Bleecker street, where he will be connected with the electrical department.

Trenton, N. J.—The New York Car & Truck Co., with a capital stock of \$2,500,000, has filed articles of incorporation and will engage in the manufacture of railway and street cars, carriages, automobiles, omnibuses and other vehicles. The incorporators are J. H. Turner, H. S. Rossell

and T. S. Strong, Jr., all of Jersey City, the registered office of the company.

New York—The Duquesne agency has removed to 306 West Fifty-second street.

Alden, N. Y.—Work upon the new dash and automobile guard factory has commenced.

Allentown, Pa.—A charter has been granted to the Berwin Automobile Co., with a capital stock of \$10,000.

Rochester, N. Y.—The Thompson-Schoeffel Co. has completed a new garage to take the place of the one recently burned out.

Philadelphia—Thomas M. Twining is now the local agent for the Marion car, and has opened salesrooms at 218 North Broad street.

Philadelphia—A charter has been applied for by the Motor Car Livery Co., which intends to conduct a motor livery business.

Pontiac, Mich.—The Mt. Pleasant Body Co., J. W. Butcher, president, is preparing to remove here July 1, when it will occupy the C. V. Taylor factory.

Atlanta, Ga.—B. L. Jones, of Macon, is endeavoring to interest local capital in an automobile factory to be established in this city, and in all probability the enterprise will soon be started. It is proposed

RECENT INCORPORATIONS

New York—De Barres Automobile Co., capital stock \$50,000; to manufacture, deal in and rent automobiles; incorporators, W. H. Barnard, A. E. Solomon and R. De Barres.

Syracuse, N. Y.—De Long Motor Co., capital stock \$25,000; to manufacture motor boats, automobiles, etc.; incorporators, M. E. Coe, G. E. De Long and Adolph M. Clark.

Dayton, O.—Myers Automobile Top Co., capital stock \$25,000; to manufacture tops; incorporators, W. C. Myers, Thomas H. Kelley, John D. Follett, J. W. Durnell and H. T. Bowman.

Jersey City, N. J.—Vandegrift Automobile Co., capital stock \$100,000; to manufacture automobiles, carriages and mechanical and electrical engines, express, transfer and forwarding; incorporators, Henry G. Morris, Pedro G. Salom and F. Rogers Donahue.

warding; incorporators, Henry G. Morris, Pedro G. Salom and F. Rogers Donahue.

Kansas City, Mo.—Buick Automobile Co., capital stock \$2,000; to deal in automobiles; incorporators, W. S. Hathaway, H. G. Kirkland and W. F. Schreiber.

Elizabeth, N. J.—East Jersey Motor &

Elizabeth, N. J.—East Jersey Motor & Transportation Co., capital stock \$100,000; to manufacture cars, cabs, carriages, ship chandlery, etc.; incorporators, R. T. Potts, E. M. Wood and seven others.

New York—Hamilton Garage & Motor Co., capital stock \$20,000; to manufacture motors, engines, machines, etc.; incorporators, L. W. McFarland, W. F. Nevins and Frank M. Raynor.

Brooklyn—Grant Square Automobile Co., capital stock \$20,000; to manufacture motor vehicles and parts; incorporators, Charles F. Batt, Frank Wilson and W. Weston.

Boston—Boston Auto Livery Co., capital stock \$15,000; incorporators, Antonio Leverone, Royal A. Waiteling and Frank A. But-

to buy most of the working parts and assemble them at the Macon plant.

Boston—The Diezeman Shock Absorber Co. is about to open a branch here.

Newark, N. J.—The Motor Vehicle Co., of Broad street, is building an extension to its garage.

Indianapolis—Sears Brothers' automobile and repair shop has been damaged by fire to the extent of \$500.

New York—Stockholders of the Motor Engine Co. will soon vote upon a proposed increase in the number of directors.

Humboldt, Neb.—Cooper & Linn have formed a partnership for the manufacture of a tire guard, invented by Louis Slama.

Philadelphia—The Ludwig Auto Co. has opened a new branch at 236 North Broad street, and will make a specialty of repairing.

Columbus, O.—The Sandusky Automobile Co. has reduced its capital stock from \$150,000 to \$15,000. J. J. Hinch is the president.

Boston—C. D. Smith has recently become the eastern sales supervisor of the Winton Motor Carriage Co. and will have his headquarters in Boston.

Detroit—W. D. Dunning, of Syracuse, N. Y., has been negotiating for the erection of a garage on Woodward avenue, just north of St. Paul's cathedral.

Melrose, Mass.—H. M. Eastman & Co. have opened a garage, built of concrete. They have taken the agency for the Cadillac for Melrose and vicinity.

Boston—H. C. Stratton & Co. have taken on the agency of the Mora for New England, in addition to the American Mercedes, which they already have.

Nashville, Tenn.—A charter has been granted to the Memphis Automobile Co., of Shelby county, with a capital stock of \$10,000. The incorporators are E. B. Meyer, William Floyd, A. L. Cross.

Philadelphia—The Brazier Automobile Works, the agents for the Marmon, have finished the extensive improvements which they were planning for their garage, and are now able to accommodate more cars.

New York—It is rumored that the Autocar Co. has arranged for a new agency, and that it will make its head-quarters at 138 West Thirty-eighth street, upon the removal of the Reo company to its new garage on Sixtieth street, on June 1.

Philadelphia—L. M. McComb has been appointed manager of the South Broad Automobile-Co., of 729 South Broad street. This company has just secured the agencies for the Dorris, Duquesne, Gale and Duryea. In a short time a new garage and salesroom will be built.

American Motor League

OFFICIAL BULLETIN

National Headquarters, Vanderbilt Building, New York

NEW YORK TO PHILADELPHIA

This week is printed the first section of the popular route between New York and Philadelphia, and for the benefit of Philadelphia members these maps will be prepared in reverse form, showing the route from Philadelphia to New York. The best through routes are shown by heavy lines, while branch routes connecting important towns are also clearly indicated. New York the start is usually made from the south end of the city by way of either the Cortlandt street or the Staten Island ferry. The former leads over the familiar route through Newark, Elizabeth and Rahway, while the latter includes the popular run across Staten Island to Tottenville. whence the ferry puts the tourist on the Jersey shore. A short run to Metuchen connects with the Newark route. By the use of the maps already published this route is put in direct sequence with routes from all the important cities and towns in southeastern New York, northern New Jersey and western Connecticut.

The second part of the New Jersey route will cover the roads between New Brunswick and Trenton, while the third section will finish the journey which lies between Trenton and Philadelphia. Recent improvements have done much to perfect this route and the entire stretch between the big cities may now be made on a good road surface.

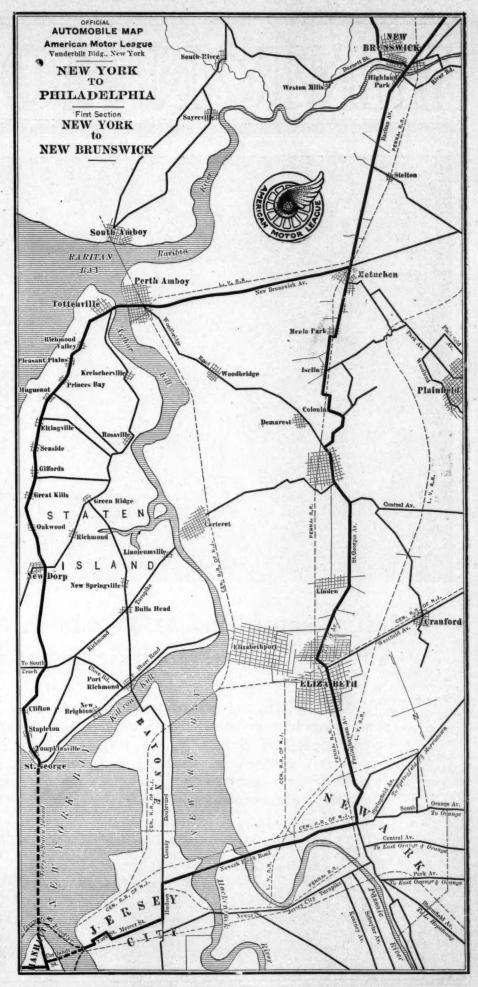
All these maps and many others will be printed in the A. M. L. road books, of which a copy will be given to each member of the league. These maps are being prepared much more rapidly than they can be printed in these pages and the only object of the league is to show here from week to week that substantial work is being done. All these maps will be printed on cards for immediate use and a list of cards will be issued fortnightly from head-quarters for the information of motorists.

WESTERN ROUTES WANTED

Members in Ohio, Indiana, Illinois and Michigan and other states are writing to the secretary for maps and route descriptions. We are putting together much information covering these states, but more is needed. Maps and route descriptions are not to be plucked from bushes and are not brought by Santa Claus.

JOIN THE LEAGUE

Like the United States government, this league is an everlasting perpetual pauper. It has to be supported by the people who are a part of it. There is no initiation fee. Dues \$2 a year. Full particulars sent on request by the American Motor League, Vanderbilt building, New York.



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